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ABSTRACT

Presented is a curriculum guide for home economics which developed out of a 3 year program designed to provide vocational education for visually impaired students enrolled in junior high, secondary, and community colleges in a five county region of California. The guide presents a section each on foods, grooming, home management and child care, and sewing. Major appliances are discussed at the beginning of each section in terms of description, safety, adaptations, maintenance, and orientation, followed by nonvisual techniques which are listed in alphabetical order. Approximately 50 appliances or techniques are considered under foods among which are the blender, the electric skillet, basting food, and fat and frying. Twenty-seven grooming techniques are presented such as aftershave care and hair setting. The section on home management presents 28 appliances or techniques including the clothes dryer, iron, baby diapering, and fuse changing. Thirty skills such as basting seams and cutting out a pattern are taught in the section on sewing. An appendix gives sources for large print, braille, or talking book publications, a discussion of orientation and mobility, and a list of consumer publications. For other program documents see EC 051 130, EC 051 132, and EC 051 133. (DB)

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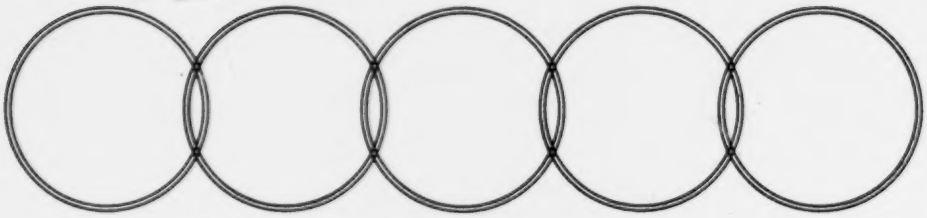

5-COUNTY

VOCATIONAL SKILLS TRAINING FOR THE VISUALLY HANDICAPPED

home economics guide

Santa Cruz County Office of Education
Richard R. Fickel, Superintendent
701 Ocean Street Santa Cruz, California 95060

MAY 1972

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A FIVE COUNTY

VOCATIONAL SKILLS TRAINING PROGRAM FOR THE BLIND

HOME ECONOMICS GUIDE FOR

VISUALLY HANDICAPPED STUDENTS

by

Constance H. Rahn
Homemaking Specialist
Vocational Skills Training Program

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THE SANTA CRUZ COUNTY
OFFICE OF EDUCATION
City of Santa Cruz, Ca. 95060

DR. RICHARD R. FICKEL, SUPERINTENDENT
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FOREWORD

The Santa Cruz County Vocational Skills project for blind and partially sighted minors was authorized with the passing of S. B. 632 (Grunsky) in 1969. In concert with the County Superintendents of San Mateo, Santa Clara, San Benito, and Monterey Counties, a regional program of supplemental in-service and pupil instruction was submitted to the Vocational Education Section, State Department of Education, in November, 1969. In the proposal document, the major thrust of the project was described as: (1) meeting the unmet vocational education needs of visually handicapped pupils enrolled in junior high, secondary, and community colleges in the five-county region, and (2) providing in-service training to regular vocational education teachers and work experience counselors assigned to schools where blind students are enrolled.

The program was funded for a three year period from 1969 to 1972 through the Vocational Education Act of 1964. Vocational areas emphasized were technical and industrial arts, home-making, and work experience. This three year project has also included an information and dissemination component where the project staff have conducted over a dozen workshops throughout the State in conjunction with the Vocational Education Section of the Division of Special Ed-

ucation, State Department of Education. Many Department of Rehabilitation counselors for the blind participated in the workshops.

Vocational Education teachers who had not previously had the opportunity of working with visually handicapped students, have had, through this program, the opportunity of being trained in the skills required to broaden each child's vocational potential through the use of tools, equipment, and the development of skills associated with home-making and technical industrial occupations, as well as work experience.

This Curriculum Guide will provide counselors for the blind, vocational education teachers, and teachers of the visually handicapped with specific guidelines demonstrating the techniques required for the instruction of visually handicapped pupils in selected occupational courses and counseling, as well as work training.

DR. LAWRENCE A. EDLER, Director
Secondary Programs

RICHARD D. STRUCK, Director
Programs for Exceptional
Children & Adults & Pupil
Personnel Services

PREFACE

The Santa Cruz County Board of Education and County Superintendent and Staff are committed to providing students, in terms of individual capability notwithstanding handicaps, the opportunities for vocational development which will prepare them to find their place in society as productive participating members.

The purpose of this exemplary project, Vocational Skills for the Blind and Partially Sighted, has been to provide vocational skill training and counseling to blind and partially sighted students in the five-county area of Monterey, San Benito, San Mateo, Santa Clara and Santa Cruz Counties.

An indication of the cooperative effort necessary to provide these services and experiences is the eagerness and participation of the superintendents, teachers and employees of the five counties together with state consultants and rehabilitation counselors. The efforts and results have been most rewarding.

RICHARD R. FICKEL, SUPERINTENDENT
Santa Cruz County Office of Education
Santa Cruz, California

INTRODUCTION

This curriculum guide was written to be of aid to a divergent population of vocational education instructors, visually handicapped students, and teachers of the visually handicapped. We have tried to avoid being overly simplistic and at the same time we have been aware that vocational education teachers are unfamiliar with specific uses of the tactual and hearing senses and also that there are visually handicapped students who have never used sewing equipment, kitchen appliances, or grooming aids. We hope the reader will keep in mind the heterogenous populations we are trying to instruct and will be patient when a detailed description appears simplistic to the reader.

The techniques described are those which have been developed and used during this past year. If the reader has developed techniques other than the following descriptions, keep in mind that there are always several ways of accomplishing a task. The following techniques are to be used as suggestions or illustrations. We do not suggest them as the only or even the best way of doing things, but as one possible way.

The guide is divided into four major areas: 1. Foods, 2. Grooming, 3. Home Management including Child Care, and 4. Sewing. Orientation to major appliances is placed at the beginning of each section since that is usually taught first. All other techniques are listed in alphabetical order for quick reference.

We do not wish to slight lefthanded people but for expediency all directions are written assuming right handedness.

The author wishes to acknowledge the great amount of time and effort which individuals have given her. Arlene Huckins, Home Economics teacher

at the California School for the Blind in Berkeley, taught the author many of the techniques described in the following pages. Sally Jones of the Orientation Center for the Blind in Albany, California has always answered questions "on the spot" when immediate help was needed and has graciously allowed parts of her Sewing Techniques for the Blind Girl to be reproduced within this guide. Fran Wolf of the San Carlos High School Home Economics Department, San Carlos, Jane Altavilla of the Seaside High School Home Economics Department, Seaside, and Mamie Ireson of the San Mateo Junior College Home Economics Department, San Mateo, have all given much valuable advice. Mrs. Altavilla has also willingly allowed reproduction of parts of her excellent curriculum on variable credit, Clothing and Textiles I. Teachers Guide and Workbook, which she and Mrs. Bullock hope to publish soon. Last but most important, the author's students have endured many trials and errors and have given much helpful advice. Specifically, Jane Carpenter, Deborah Fries, Peggy Dyer and Linda Bowman have been of invaluable help this year.

Constance Rahn

I. FOODS

FOODS INTRODUCTION

This section is organized with descriptions of the equipment used and placed at the beginning of the section. Each equipment description is organized with subheadings such as "Safety" and "Adaptations" so that it can be reviewed quickly and thus be as helpful as possible. The pictures included are examples to which one can refer while reading.

The remainder of the food section is arranged in alphabetical order for ease in locating specific techniques. The titles are generally written with the verb first so if one needs to know how to baste meat look under "Basting" not under "Meat".

One way to use this guide is to examine the recipe assigned and pick out all of the motor skills that must be performed. Then look up each action word in the Table of Contents. For example, in a basic biscuit recipe one finds instructions to preheat oven, sift, measure dry ingredients, measure liquid ingredients, cut in, stir, pat dough evenly, cut with biscuit cutter, place on cookie sheet, and place in oven. After making the list, look up the techniques which one does not yet know.

When teaching a technique which has many steps before completion, consider teaching by the "reverse task analysis" method. The end product is shown first and then the last steps leading to the end product are taught. That way the preceding steps make more sense and so are easier to understand.

BLENDER

A. DESCRIPTION

This appliance is a large glass container with a lid and a rotating blade at its base. The container fastens onto a motor which drives the blade. The motor has controls on the front for various speeds.

B. SAFETY

Make sure that the container is tightly fastened to the base before turning on the motor so the blade will be secure. Check the seating with ones fingers. Before turning on the motor, place a hand on the container top to determine if the container is "overloaded" or if the contents might cause the blender to move on the counter because of excessive vibration.

Always keep the lid on the blender while the motor is running so the contents will not splash out. Never put an object - such as a spoon in the container when it is turned on as the object could become caught or be propelled into the room. When turning the blender on, begin with a slow speed and then turn to higher speeds after judging the effect on the contents to be blended.

C. ADAPTATIONS

There are none. The controls can easily be memorized and do not need to be marked.

D. MAINTENANCE

Container can be detached from the blender and immersed in water to clean after each use. Check container and lid for odors before each use and, if necessary, rinse out with baking soda water to freshen them. Wipe base with soapy cloth to clean off any spray. Check cord and plug periodically for frays and looseness.

E. ORIENTATION

Check where blender is located on counter and be sure that it is at least six inches from the counter edge.

With blender disconnected, examine "off" button and row of buttons for differing speeds. "Off" button will be at far left or far right. The button nearest "off" button will be the slowest speed. The button farthest from "off" button will be fastest speed. Be able to change to different speeds by pushing correct button on command.

Notice where blade is in container and how it moves. Place container on base and tighten it by turning clockwise. Fit lid securely on top of container. Plug in blender. Turn on to low, medium, and high speeds.

CAN OPENER, ELECTRIC

A. DESCRIPTION

An electric can opener is a small rectangular appliance housing a motor. At the top of the front side there is a clamp which moves up and down. As the clamp moves, a cutting blade and rolling wheel move closer together or farther apart. The cutting blade is circular and out of the way so one will not be cut by it. There is a magnet hanging in front of the blade to hold the cut lid.

B. SAFETY

The circular blade is protected so it will not cut the person operating the can opener.

One should be careful of the lid after it has been cut from the can and is held by the magnet. To remove the lid, place hand on can opener top and move the hand toward ones body until the magnet is touching the palm of the hand. While the magnet is still touching the palm, move fingers out and take the lid between the thumb and forefinger. Remove lid from the magnet and discard.

C. ADAPTATIONS

There are none.

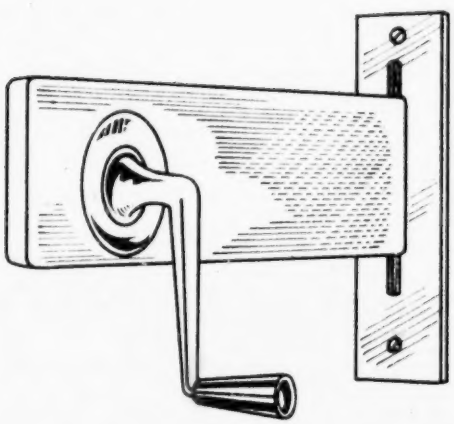
D. MAINTENANCE

The can opener should be wiped often with a damp cloth. Pay special attention to the cutting blade area. The cord and plug should be checked occasionally for frays and looseness.

E. ORIENTATION

Locate the clamp on the top front of the can opener and push it upward from 3 o'clock to 12 o'clock. This moves the cutting blade and rolling wheel apart. They are both located on the front side of the opener. Place thumb and forefinger of one hand on cutting blade. Insert top edge of can in blade opening by tilting it slightly to the right. Engage blade by pushing clamp down to the 3 o'clock position and thus causing the blade and rolling wheel to move together. This action will cause the blade to puncture the can top. Turn on the control. The can is automatically turned and cut until it has moved in a complete circle. The opener will then automatically stop and the magnet in front of the blade will catch hold of the lid. Hold the can in one hand and move the clamp from 3 o'clock to 12 o'clock releasing the can from the cutting blade and rolling wheel. Remove lid and discard.

CAN OPENER, WALL



A. DESCRIPTION

The wall can opener is mounted on the wall and must be operated by hand. It can be swung toward the wall out of the way when it is not in use. It has a lever on it, a handle, a cutting wheel, and a magnetic lid holder.

B. SAFETY

One must be careful in removing the lid from the magnetic lid holder. Bring hand down on top of can opener with palm open and downward. When magnetic lid holder is felt by palm, slowly reach fingers out and down to grasp lid. Remove and dispose.

C. ADAPTATIONS

There are none.

D. MAINTENANCE

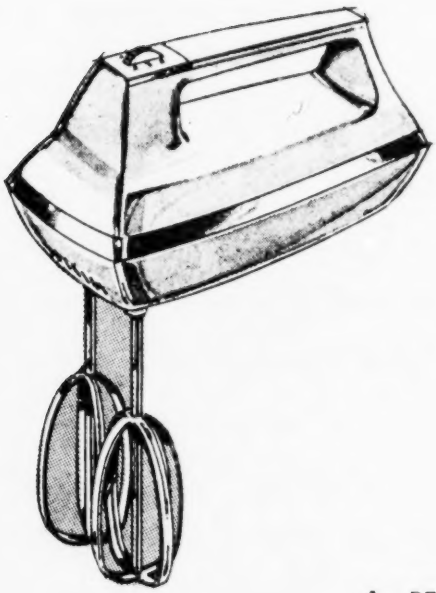
Periodically wipe off opener with soapy water to remove any accumulated dirt.

E. ORIENTATION *

Swing can opener into desired locked position. Disengage, or open, the blade by moving clamp up and forward or turning the handle. Locate position of cutting blade with thumb and middle finger of one hand. Insert top edge of can in blade opening by tilting it slightly to the right. Re-engage blade by pushing clamp back and down or turn handle. Support can by grasping it lightly allowing it to turn in hand. Turn handle until click is heard indicating cutting process is complete. Release cutting blade to remove can and place can on counter. Remove lid from magnet and return can opener to swingaway position.

* Reprinted from A Step-by-Step Guide to Personal Management for Blind Persons with the permission of the publisher, the American Foundation for the Blind.

ELECTRIC MIXER



A. DESCRIPTION

There are two kinds of electric mixers. One is a portable mixer which is lightweight and compact so it is easily lifted. A cord is attached to one end. There is a handle on top and at the other end is the speed setting control. At the bottom of the front end are two holes in which to place the beaters.

The stand mixer is the same as the portable mixer except for a slot underneath the back end. The stand top is slipped into this slot so the mixer can stand alone.

B. SAFETY

Always place the beaters in mixer while it is still disconnected. After pushing beaters into beater holes, test to see that they are secure by pulling on them. Place them in the bowl of food to be mixed and then connect mixer and turn on the power. When finished beating, leave beaters in the bowl of food while turning off power and disconnecting plug from wall. This way the beaters are always down inside bowl if they accidentally begin turning. Also the bowl protects ones hands from the moving beaters.

Examine one of the beaters to see how it has blades which, when moving, could injure ones hand. Lock both beaters into position. Notice how the beaters interlock with each other and turn into each other when turned on. If ones hands were caught in beaters while moving they could be injured.

Notice the cord length. Be sure that the cord is out of the way of the beaters and does not get entangled while the beaters are moving.

C. ADAPTATIONS

The speed control may be marked at each setting by applying drops of white glue which will dry raised and can be felt. One may also mark the settings with Dymo tape.

D. MAINTENANCE

Eject beaters after use and wash with soap and water. Wipe off mixer with soapy cloth to get off beater spray. Occasionally check cord and plug for wear such as frays and looseness.

E. ORIENTATION

Examine beaters, noticing that there are blades at one end and inserts at the other end which are put into holes and locked. Be sure that the beaters are locked in. Insert and eject to see how they go in and are released. Feel beaters when locked in and notice how they would injure hands if caught while beaters were moving.

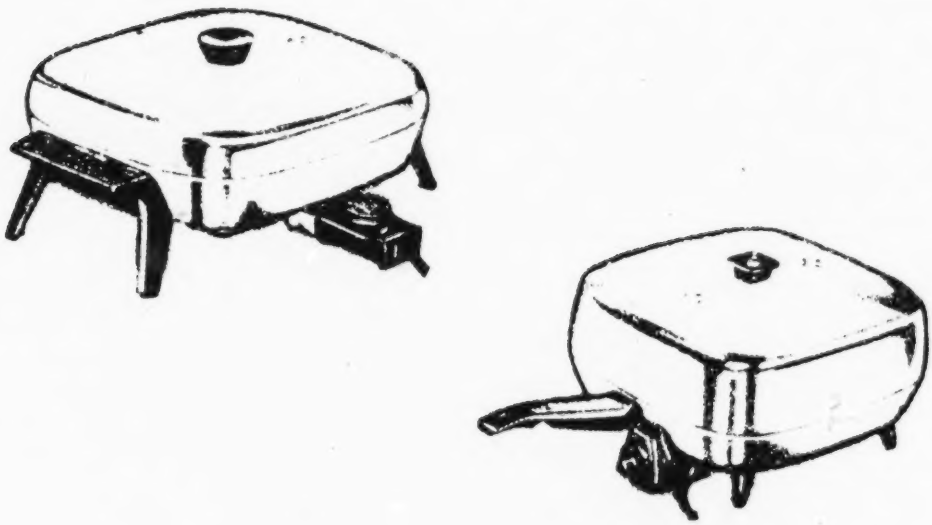
Examine mixer head. If it is a stand mixer it will tilt back and lift up beaters. Notice how it slides off stand. Tilt it back and forward.

Examine controls, first making sure machine is disconnected. Notice the low, medium, and high settings. Be able to turn the control to each of these settings on command.

If mixer is stationary, locate the bowl holder. It rotates freely in clockwise and counterclockwise directions and also moves from side to side.

Place the bowl on the stand base. Lower beaters into bowl. Plug in beater. Turn beaters on to low; medium; and high. Notice the differing sounds of each speed.

ELECTRIC SKILLET



A. DESCRIPTION

An electric skillet is a large pan on legs with a large handle, a detachable plug, a temperature control, and a lid.

B. SAFETY

This appliance is a very portable and can be placed anywhere so be sure to use it in a safe place. Most electric skillets can be placed on a kitchen counter but check with the manufacturer to be sure. Do not place the electric skillet too close to the counter edge. Try to place it near the kitchen or stove fan. Be sure to turn the handle away from the counter edge so it will not accidentally get bumped.

The inside bottom of the pan can become very hot if the temperature control is set at a high setting so one should not touch that surface. However, the handle is heatproof making it easy to work with the hot pan when necessary.

When washing the pan always detach the electric cord first. Never place the detached cord near water so that it might accidentally fall in. Follow the manufacturer's instructions for washing since some plug outlets should not be immersed in water. Immersion of the wrong type of plug outlet could cause a short and ruin the pan.

C. ADAPTATIONS

The temperature control may be marked for the various temperatures by applying white glue over the numbers. This glue will dry raised and can be felt. Or, marked dymo tape can be attached to the control. Or, the control can be marked by removing it (pulling it straight off), drilling holes at each setting, and inserting 1/2 inch long rivets or brass escutcheon pins in each hole. These can also be felt.

D. MAINTENANCE

Wash skillet after each use. If food sticks to the bottom, the pan can be presoaked easily. Wash the outside of the pan and the legs also, being careful not to immerse the plug outlet into water.

Occasionally check cord and plug for frays and looseness.

E. ORIENTATION

Notice size of skillet. Notice where skillet handle is. Notice where temperature control is. Place left hand on handle and find control with right hand. They are conveniently close to each other.

Notice temperature settings. The settings go from 100° to 500° in 50° intervals. To turn the control to 300°, move the control counter-

clockwise 180^{0} or until 6 o'clock is at 12 o'clock. To set control at 500^{0} turn control counter-clockwise a complete turn.

RANGE WITH OVEN

A. DESCRIPTION

A range can be heated with gas or electricity. It usually has four burners although some apartment ranges may have only two. The oven is located either above or below the flat burner space.

B. SAFETY

The burners and oven heat to a temperature high enough to burn a person. Therefore, one should avoid touching the burners and the oven racks, sides, and elements directly when hot. One should also be aware of loose clothing and hair which could catch fire easily. Avoid wearing long, loose sleeves when using the range. Pans taken directly from a hot burner or oven should be placed out of the way of people's movement on a surface which can stand the heat.

If the range is a gas one, one should be careful that the gas ignites when turned on. Check for ignition by feeling for heat above the burner. Remember that gas is a flame and flames move.

If the odor of gas is noticed, a burner control may be defective or the pilot may be out. If no heat is felt near the pilot, follow instructions for "Pilot Light Relighting" or call the utility service department and they should send a service man.

C. ADAPTATIONS

The burner and oven controls may be marked for various temperatures by applying white glue over the numbers which will dry raised and can be felt. Or, the control can be removed by pulling it straight off and holes drilled where the numbers are. Rivets 1/2 inch in length or round brass escutcheon pins can be inserted in the holes so that they are raised and can be felt. Or, the control can be marked with Brailled dymo tape.

D. MAINTENANCE

The counter space of the range top should be wiped after each use and kept clean. When food spills onto the burners, the burner should be cleaned as soon as cool by wiping or, if removable, by immersing in soapy water and scrubbing with a scouring pad. Food spilled in the oven or splattered on oven walls should be wiped off with a soapy cloth as soon as cool and the entire oven wiped down periodically with a coapy cloth and scouring pad or covered with a coat of prepared oven cleaner and wiped clean. Be very careful of prepared oven cleaners. They are excellent cleaners but contain harsh, dangerous chemicals. Follow the manufacturer's directions carefully.

E. ORIENTATION

Feel range top noticing how many burners there are. Notice where they are located on the top. Some ranges have space for the four burners in a

square, while some ranges have an extra space either in the center of the range top or to one side of the burners which is insulated so that hot pans may be set there and create more working space.

Notice the sizes of the burners. Some ranges have four large burners, while other burners have two small burners about 8" in diameter and two large burners about 10 " in diameter. The ranges with two sizes of burners sometimes are arranged with the smaller burners on the left and right front, and the larger burners on the left and right back. Other times the smaller burners are on the left front and right back, and the larger burners are on the right front and left back.

Use smaller pans on the small burners and large pans on the large burners to conserve heat and to avoid catching sleeves on fire.

Locate the burner controls on the range. Notice where the burners are in relation to the controls. Some ranges have the burner controls located on a panel in back of and above the burners, while other ranges have the controls on a panel in front of the burners, and a few ranges have the controls placed to one side of the b urners. When the controls are placed in back of the b urners, one must be careful so that ones sleeves do not catch fire when reaching over a lit burner for the controls.

Demonstrate which control regulates which burner. On some ranges the far left control regulates the left front burner, the second left control regulates the left back burner, the third from the left control regulates the right back burner and the right control regulates the right front burner. On other ranges, the far left control regulates the left front burner, the second from the left control regulates the right front burner and the far right control regulates the right back burner.

Locate temperature indicators on the control. Notice how dial turns to various temperatures. On some ranges the control moves counterclockwise

a quarter turn, 90 degrees, to light the gas burner and achieve medium heat; and a half or 180 degrees turn to high heat. Hold a hand above the burner to determine if the temperature is correct. One will feel the heat high above the burner if it is on completely; about a foot above the burner at medium heat; and close to the burner surface when a low temperature. On some electric ranges the control turns clockwise to low, medium, medium high and high temperatures. Off is at 12 o'clock, low at 2 o'clock, medium is at 5 o'clock, medium high is at 7 o'clock, and high is at 10 o'clock. Only the "off" position clicks. Other range controls turn counter-clockwise with low at 9 o'clock medium at 6 o'clock, and high is at 1 o'clock.

Locate oven on range and open oven door. Some ranges have the oven beneath the burner section while other ranges have the oven at eye level above the burner section. Some oven doors open from the top and swing down, while a few open from the left and swing to the right or open from the right and swing to the left. The position of the oven and the way it opens determines where the pan to be placed in the oven should be set while opening the door to a hot oven.

Notice the racks in the oven. Notice how many racks there are. Usually there are two sliding racks in an oven. Pull the racks out and in to see how much strength is needed to move racks smoothly. Later when a pan of hot liquid needs to be removed from the oven the rack can be moved smoothly and the liquid not jarred. Notice how the racks are removed and placed back in when they need to be adjusted to a different level.

Shut the oven door and notice where oven control is in relation to oven door. On some ranges the oven control is directly in the center of the control panel in front of the burners and therefore, directly above

and in center of oven door. The control is turned clockwise. Off is at 12 o'clock, 150° is at 10 o'clock, 350° is at 6 o'clock, and 450° is at 1 o'clock.

Some ranges have two oven controls. Both are located at the upper left of the control panel. The left oven control turns counterclockwise. Off is at 12 o'clock, bake at 3 o'clock, time-bake at 6 o'clock, and broil at 9 o'clock. The control clicks at each setting. After the control has been set at the proper place, the temperature control may be set. The temperature is indicated in 25° intervals from 150° at 2 o'clock to 450° at 11 o'clock.

If the range is gas, to light the oven do not turn the control higher than 150°. Otherwise, the unlit gas floods the oven and not ignite. If the oven does not automatically light, then with the gas off, feel on the oven bottom along the center of the front edge until the hole for the pilot light is found. Strike a match and lay it beside the hole. Turn on the gas to not more than 150° and listen for the sound of the gas flowing, sort of a soft whine. When the gas is ignited there will be a sudden soft "whomp" sound and the match can be removed. Do not turn on the gas and then light the match as the gas which has flowed out could ignite in the air and explode.

REFRIGERATOR WITH FREEZER COMPARTMENT

A. DESCRIPTION

Usually around six feet high and three feet wide, a refrigerator is insulated to keep food at lower than room temperature. It has a door which swings open either to the right or to the left. It contains three or four adjustable shelves which sometimes can be pulled or swung out so things in the back are easier to reach. There is a crisper drawer where vegetables and fruit are stored to keep them fresh longer. There is sometimes a meat drawer to keep meat fresh longer. There are several compartments on the door. There is a covered shelf where butter is stored to keep it closer to room temperature. There is a shelf with indentations for eggs, and extra space for storage of other food. The temperature control is located on one of the refrigerator walls

above the top shelf. It may be a dial or a tab and may move horizontally, vertically, or in a circle depending on the model. Follow the manufacturer's instructions for moving the control. The control has an "off" position and then usually five temperature settings.

Many times a section at the top or at the bottom of the refrigerator is a freezer. It will have a separate door since the freezer must maintain a lower temperature. It will have one or two shelves and a place to store ice trays. It also may have storage space in its door. It will have a temperature control like that in the refrigerator which should be set according to the manufacturer's instructions.

B. SAFETY

There are no unusual safety features.

C. ADAPTATIONS

The temperature controls can be marked with marked dymo tape or white glue dropped over the numbers which will dry raised and can be felt.

D. MAINTENANCE *

Disconnect refrigerator. This eliminates resetting of temperature and the danger of breaking the automatic light bulb from water dripping on the hot bulb. Remove frozen food, meat, milk, and butter and put in container. Items should be wrapped in newspapers if styrofoam container is not available. Remove ice cube trays and place in sink. Run hot water over ice cubes and empty trays into sink. Remove everything from the refrigerator starting from the top shelf and working down. Place on counter. Articles from each shelf should be grouped together and the taller articles should be placed near the back of counter. Place pan of very hot water in freezing compartment or directly under it.

Remove all articles from the door shelves and place in separate

location on table or counter. Thoroughly clean the inside of refrigerator door with detergent water and dishcloth, starting at the top being sure to clean the butter and cheese container well. Clean with horizontal then vertical strokes to avoid skips. Clean rubber gasket around inside of refrigerator door with detergent water and dishcloth. Rinse dishcloth under warm running water at sink then proceed to rinse off inside of door and rubber gasket. Return articles to door shelves after wiping them off and drying with a paper towel. Remove all shelves from refrigerator and wash in sink with detergent water being sure to get the underneath side of shelf thoroughly cleaned.

Empty pan of water from freezing compartment periodically and refill with hot water to speed defrosting. Check the freezing unit until all ice is off either by melting or by sponging and removing pieces as they break off. When all ice is gone, wash freezing compartment thoroughly with detergent water. Dry thoroughly with paper towels.

Wash with detergent water and sponge the complete inside of refrigerator, starting at the top, and moving to the back, the sides, and the bottom. Return dried shelves to refrigerator in order removed. Replace food on shelves; be sure to leave proper air space between items so that there will be good circulation. Connect refrigerator and close door.

At this time, clean hydrator and meat container if there is one, at the sink with detergent water. Rinse. Line hydrator with paper towels, replace vegetables, and put back in refrigerator. Freezing compartment should be cool by this time and the frozen foods can be

replaced. Before replacing, remove any frost which may be on them. Wash and rinse ice cube trays, fill with cold water, and return to freezing compartment. Wash outside of refrigerator with detergent water. Wipe dry with paper towels.

E. ORIENTATION

Examine the outside of the refrigerator and notice if it has one or two doors. Notice where the handle is and if the door opens to the left or to the right. Open the refrigerator door and examine the storage space on the door. Notice where the eggs go and how the door to the butter shelf lifts up. Examine the shelves inside the refrigerator, noticing how many, if they are movable, and how to remove them for repositioning. Open vegetable crisper and notice how much space it contains. Also open meat drawer and examine it. Find the temperature control and notice if it is a dial or a tab and how it moves. Find "off", "low", and "high".

If there is a second door, open it and examine the freezer section. Notice the storage space in the door, where the ice trays are stored, how many shelves there are, and if they are adjustable. Find temperature control and notice if it is a dial or a tab and how it moves. Move it to "off", "low", and "high".

* Reprinted from A Step-by-Step Guide to Personal Management for Blind Persons with the permission of the publisher, the American Foundation for the Blind.

LIST OF EQUIPMENT - FOOD AIDS
(Most equipment can be found in a hardware store)

1. Graduated measuring cups - use for both liquid and dry ingredient measurement

2. Graduated measuring spoons - made of stainless steel, bend the handles so they are perpendicular to the spoon bowls and it will be easier to measure liquids

3. Large pyrex custard dish - use under measuring cups as overflow dish when measuring liquids

4. Pot holder mitt - has definite form, making manipulation much easier than with regular potholder

5. Asbestos pad - for use with delicate cream sauces when fine temperature control is necessary

6. Plastic pot scrubber - use for peeling thin-skinned vegetables

7. Small wide-mouthed containers - store liquids and dry ingredients (such as Worcestershire sauce and salt) which are usually measured in small amounts, for greater ease in filling measuring spoons

8. Small covered jars - for more rapid mixing, shake salad dressing or sauces in these containers instead of stirring

9. Scissors - use instead of knife for chopping herbs and vegetables such as green beans, celery, etc.

10. Braille timer - Braille dots on 1 hour or 30 minute clock timer face. Available from American Foundation for the Blind.

11. Rubber spatula - can scrape bowls more thoroughly than with a spoon.

12. Colander - for safely draining hot water off foods.

13. Sharp knives - work more efficiently and require less strength than dull knives.

14. Basters - one for filling steam iron and another to remove excess fat from gravies or to baste food.

15. Long-handled spoon - to position pan on burner

16. Wide-mouthed cannisters - so can comfortably scoop dry ingredients into graduated measuring cups

17. Electric mixer on stand - leaves both hands free when mixing.

18. Wash cloth pinned to apron - for keeping hands constantly clean so can get more accurate tactual cues.

List of Equipment Continued -

19. Pie cutting guide - guides knife when cutting pie. Available from American Foundation for the Blind.

20. Cooper meat thermometer with glass removed - mark temperature with dots and then can feel if temperature correct. With glass removed, temperature will be correct with ten degrees.

21. Food chopper - for finely chopping hard, crisp food

22. Roast lifter - aids in removing roast or large bird from roasting pan.

23. Eye dropper - for measuring small amounts of liquid seasoning

24. Paper plate - more body than waxed paper, when pouring sifted ingredients into bowl. Can store sifter on it also.

25. Aladdin Knife sharpener - to keep knives sharp so they work more efficiently.

26. Thermo-formed recipes - made of a plastic, they can be wiped clean and reused without damaging the Braille.

27. Pastry cloth - purchase colored heavy cotton and make cloth which will contrast with the pastry dough to aid partially sighted students.

28. Egg separator - to aid in separating egg white from egg yolk.

29. Can Goods Markers - either plastic and elastic ones from American Foundation for the Blind or ones student makes himself by Brailling.

KITCHEN PREPARATION

The first rule in preparing a kitchen is to be organized. Place things near areas in which they will be used; pans near stove, measuring utensils near baking ingredients, etc.

Label wherever necessary. Oven and range controls, electric mixer speeds, toaster settings, timer, measuring cups and spoons, and shelves on which canned goods stored can all be labeled if necessary. Labels to put on canned goods can be made and stored to place on newly purchased goods. Seasonings which are usually measured in small amounts should be transferred to small widemouthed jars which can be labeled. These jars make it easy to measure a pinch or to fill measuring spoons by dipping into seasoning instead of pouring out. Transfer dry ingredients such as flour into labeled wide-mouthed cannisters so it is easier to scoop them into graduated measuring cups.

Store caustic products together in one place out of the reach of children. Label the products so they will not be accidentally misplaced or used incorrectly.

BASTING FOOD

Usually used on meats, the purpose of basting is to keep cooking meat moist by pouring fat and juices collected in roasting pan over the top of the meat.

The most convenient way to baste is to use a plastic bulb-type baster which has a long hollow cylinder narrowed to a point at the lower end with a hollow rubber bulb attached to the upper end. Place the pointed end in the pan bottom and squeeze the bulb, forcing the meat juices into the baster. Release bulb. Place the point of the baster on top of the meat and squeeze bulb again, moving the point along top of meat so juices flow over top of meat, moistening the entire area. Repeat procedure as needed.

If baster is not available, use a wide bowled spoon. Tip meat pan so juices collect in one corner. When tipping pan make sure the meat doesn't slide. Collect the juices in the spoon and pour them over the top of the meat, remembering where each spoonful is placed so entire area is moistened. Repeat procedure as needed.

BEATING, WHIPPING

The purpose of beating is to lighten a mixture by trapping air in it. The air is trapped in the mixture by placing the bottom mass on the top mass. An electric mixer can be used if it is available. A wooden or slotted spoon or rubber spatula is the best hand tool to use. Use a long, free motion starting with spoon at bowl side at 1 o'clock. Move spoon from bowl side across bowl bottom to 7 o'clock, come up bowl side and quickly twist wrist so that the spoon bowl turns over and the mass falls onto the top mixture. Repeat this motion vigorously until the mixture is aeriated. The recipe will usually indicate either how many strokes are needed or how many minutes of beating before the mixture is aerated sufficiently.

To whip, one uses the same procedure as in beating. The motions are done rapidly at an increasing tempo. Different hand tools, such as a wire whisk, may be suggested in the recipe.

If the bowl tends to slip while one is beating or shipping, place it on a wet folded cloth to help hold it steady.

BISCUIT OR COOKIE CUTTING

Hold the cutter lightly on top of the dough. Feel all around the cutter and make sure there is dough on all sides. Then press down cutter until the board is felt. Swivel cutter slightly to free dough edges.

BISCUIT, COOKIE PLACEMENT ON BAKING SHEET

Place cookie on sheet. To insure that cookie is far enough away from sheet edge and other cookies to allow for expansion during baking, place two fingers on north, south, east and west cookie edges. To place next cookie, put two fingers against cookie on sheet and put second cookie on sheet touching other side of the two fingers.

BLENDING, MIXING, STIRRING

All three of these actions are the same. Their purpose is to combine two mixtures so that they become one. One can combine a wet and dry mixture or a hot and cool mixture. One may use the side of ones hand, a metal or wooden spoon, or a rubber spatula. If a specific tool is to be used it should be indicated in the recipe.

Hold bowl or pan steady with left hand and take spoon in right hand or use the side of the right hand. Place spoon or hand at side of bowl with the spoon tip toward bowl bottom. Move along bowl side in clockwise motion until a 360° circle is completed. Continue moving in circular motion in ever decreasing circles until bowl center is reached. Then move outward in increasing circles until spoon is touching bowl sides again. Repeat this motion at a moderate speed until the two mixtures are mixed and one can no longer tell which is the dry and which is the wet mixture. The mixture should feel the same wherever touched -- not wetter in one place or drier in another place.

If the bowl slips while stirring, place it on a wet folded cloth to help steady it.

BOILING

The purpose of boiling is to heat liquid to a high temperature. The liquid is boiling when its surface is breaking into large, active bubbles.

Liquid will make a "whooshing" sound which will become louder and louder until it becomes a smooth sound and then, as the pitch lowers the sound will change to a quiter "rush" with a few splashes and the liquid is boiling. If the pitch goes up again it is because the liquid is evaporating -- it may continue to do so until it boils dry so be careful.

CHOPPING OR MINCING

See "Knife Cutting". Use a wooden cutting board and a sharp large knife, preferably a French knife. Hold handle with right hand and place left hand on blade tip. Place blade tip on cutting board. With quick motion, move handle up from and down to board, moving the handle a little farther toward the left after each cut until the knife has moved about 120 degrees of a circle. Repeat procedure until all of the food is in coarse even pieces if it is to be chopped and in fine even pieces if it is to be minced.

CORING, SEEDING, AND PEELING FRUITS AND VEGETABLES

For the basic cutting and peeling techniques refer to "Knife Cutting", "Peeling with a Knife", and "Peeling with a Parer". Below is a list of ways to make the coring, seeding and peeling of various fruits and vegetables easier.

Apple - Quarter it before peeling as it can be checked for spoilage faster. If it is spoiled the peeling time will have been saved. To core an apple halve,a melon ball cutter may be used to cut out the seeds. To core an apple quarter, make an angled cut from apple tip to the apple center, turn and make a second angled cut from other tip to the center, meeting the first cut. The cuts should have gone under the seeds and the piece lifted out should be a triangle shape. (When teaching this have a quarter cored. It is much easier to cut at an angle if that core piece can be felt first.)

Artichoke - The leaf tips should be cut off with kitchen shears.

Apricots - To peel, blanch by covering with boiling water and let stand for a few minutes. Skin should slip right off in hand.

Asparagus - To cut off tough end of stem, place stem in cold water. Stem will then break off where tender part begins.

Avocado - To peel, remove a slice and peel skin away with fingers, removing the skin in one piece.

Beans, Snap or Green - Cut tips off with kitchen shears. Cut into pieces with kitchen shears.

Beet - To peel, boil after cleaning with skin, tail and two inches of top left on. When tender, slip skin off with hand. Trim tail and top with knife. *

Celery - To cut into small pieces use kitchen shears.

Citrus fruit - To peel without leaving membrane, drop into boiling water and let stand for ten minutes. Peel and membrane will come off into hand with ease. *

Melon - Slice into serving pieces before cleaning out seeds in melon center. Seeds are held in melon with stringy fibers. Cut below fiber growth with knife for thorough removal of seeds and fibers.

Carrots - To remove skin, cook until tender, rinse in cold water and then rub off skin with hands.

Onion - To peel, see directions for "Apricot". If need only a bit of onion for flavoring, scrape a knife across face of a cut onion to "juice" it and then use the onion juice.

Peach - To peel, see directions for "Apricot".

Pear - To peel, see directions for "Apricot". To core a halve or a quarter pear, see directions for "Apple".

Peas - To shell, place in wire basket and immerse in warm water. When the water begins to boil, the pods will burst and the peas will fall to basket bottom. Remove basket from water and remove pods from basket. Peas will be at bottom for easy removal. *

Peppers - Green - To remove seeds and membrane, cut pepper into quarters and pull out membranes with fingers. Shake out seeds. Wash out pepper to insure removal of all seeds.

Potatoe, Sweet - To peel, follow directions for "Carrot"

Pumpkin - To seed, follow directions for "Melon"

Squash, Winter - To seed, follow directions for "Melon"

Tomato - To peel, follow the directions for "Apricot".

Jones, Sally, Kitchen Trade Secrets , Orientation Center for the Blind. Albany, Ca. 1966.

CREAMING

The purpose of creaming is to make a solid food become light and fluffy by aerating it. Usually one creams a fat. It will be easier to cream if the fat is at room temperature. Using ones finger tips or the back of a wooden spoon, press the mixture against the bowl side and move along bowl side from left to right to left in short strokes over a small area. Repeat these motions turning bowl until all of fat is fluffy.

CUBING OR DICING

See "Knife Cutting". Use utility knife and wooden cutting board. Use free hand as guide to place knife across food to be sliced. Feel to see if knife will make cut of proper width. Place thumb and forefinger on either side of blade to check thickness. When in correct position, press down on knife with even pressure and move smoothly forward and backward as you press, making sure not to turn knife but to keep it perpendicular to the board. Cut all of food into even slices. Holding cut pieces together, turn them a quarter turn on board and cut across the sliced food at even intervals. Cubed food is 1/2 to 1 inch square while diced food is less than 1/2 inch square.

CUTTING IN

Take two knives and with points touching bottom of bowl and with blades crossed and touching near handle end, draw points across bowl center keeping blades touching all of the time. Repeat procedure moving knives closer to body and then farther from body.

DISSOLVING

Food to be dissolved is a solid immersed in a liquid. As it dissolves the solid food will turn into a liquid to combine with the liquid in which it is immersed.

To dissolve a food, place it in the liquid and stir continually. At first one will feel a lump on the bottom of the liquid since most solids are heavier than the liquid in which they are immersed. Continue stirring along the liquid bottom. The lump will begin dissolving into granules which will feel grainy when touched with the spoon. Continue stirring until bottom of liquid feels smooth. Remove spoon with some liquid in it and slowly pour the liquid from spoon back into container. If any undissolved granules are left they can be felt on the spoon tip.

DRAINING

It is easiest to use a colander or a baster for draining liquid or fat off food. If the drained liquid is to be saved, place a bowl under the colander. With hot liquids it is easiest to place the colander in the sink since ones body will be protected from hot splashes and steam by the side of the sink. It is difficult to spill outside of the colander since it has a wide top

If only a small amount of liquid is to be drained, use a plastic baster. Place point of baster in pan bottom. Squeeze and release bulb at baster top. Place baster point in bowl or sink. Squeeze and release bulb again. All the liquid will flow out of point

DRY INGREDIENT MEASUREMENT

Identify which graduated measuring cup or graduated spoon is the correct measure. Do this by comparing sizes or by knowing the shape by kinesthetic memory. Dip measure into container holding ingredient. Feel with fingers for "holes" making ingredient less than full measure.

When measure is heaping take rigid forefinger, knife or metal spatula and, starting at handle side of measure, scrape metal edges all the way across to other side and measure will be level.

EGGS

An egg has a "white" and a "yolk". The yolk is a round ball usually in the center of the white and protruding upward slightly from the white. The yolk feels slightly more firm than the white. The white is the flat outer area of the egg. The white can be beaten and used as a leavening agent. Be sure not to break the yolk when separating an egg. If even a drop of yolk splatters into the white when an egg is separated in preparation for beating, the white will not leaven properly. If the yolk is broken it will no longer feel round but will have the same texture as the white. If the roundness of the yolk cannot be felt then the yolk is probably broken. If the eggs are to be separated and only the yolks used, the dish will not be damaged if a bit of white remains with the yolk.

To open the egg shell, hold egg crosswise between fingers and thumb of right hand. Tap shell crosswise on edge of bowl or table. Crack should run from thumb to forefinger. Place left hand at one end of egg and move right hand to other end of egg. Hold egg so crack is on side turned up from bowl, with thumbs together at crack. Gently pull thumbs apart, widening shell crack and the egg will drop into bowl.

One may also open the egg shell by holding the egg in right hand with lower part of thumb curled around one end and fingers curled around other end. Tap shell crosswise on bowl or table edge. With crack turned down toward bowl, gently widen the space between thumb and fingers by pulling apart crack, causing egg to fall into bowl.

There are several ways to separate an egg. After the shell is cracked in half, with left hand held over a bowl, break the egg into the left palm. The white will run through one's fingers into the bowl and the yolk will remain in one's hand. Another method requires the use of extra dishes. A small funnel can be placed in a glass and the egg cracked and broken into the funnel opening. The yolk will stay in the funnel and the white will pass through into the glass. One may also use a commercial egg separator.

When the recipe calls for egg whites beaten stiff but not dry, beat until the whites will still move when the bowl is tipped and peaks will form but lean over when the beater is removed. Do not overbeat or they will be dry.

To peel shells from hard cooked eggs, hit shell on flat surface until entire shell is cracked. Slide thumb across cracks and shell should move from egg. Keep sliding thumb over egg with a gentle pressure until all of the shell is removed. Wash egg to make sure that tiny bits of shell which may cling are removed.

FAT AND FRYING

Fat has the ability to heat to a much higher temperature than water and so is used in cooking to cook foods rapidly. Because it can become so hot, caution must be used when working with it. It may catch on fire since it can be heated so high. Always have some salt or baking soda or a metal pan lid nearby when working with hot fat. In case of fire, each one of these three items will aid in smothering the fire. NEVER throw water on a fat fire. Since fat floats on water it will only spread the fire faster. When working with fat try to keep moisture out of it as water will cause sputtering. Hot fat droplets will fly out of the pan and may injure one. Always heat fat gradually. Moisture is sometimes accidentally suspended in the fat. If the fat is heated gradually then the moisture will evaporate off and no fat will fly out of the pan.

> When possible one can alter the recipe and "oven fry". Instead of pan frying hamburger patties, place them on a wire rack over a pan and bake them in the oven for 15 to 25 minutes. Lay bacon strips or sausage on a wire rack over a pan and bake them for 10 to 15 minutes in a 400 degree oven. There will be no need to turn them, the fat will have drained into the pan and the pieces will be flat rather than curled. Brown meat under the broiler instead of in a pan on the burner. French fry potatoes in the oven after coating them with melted shortening. Lay them in a single layer on a cookie sheet and bake for an hour at 475 degrees. *

To pan fry, gradually heat the fat until it is so hot that when a pinch of flour is dropped into it a sizzling sound is heard. If no sound is heard then the fat is not hot enough. When frying, the fire should be low but one should still be able to hear the sound of frying. To turn food being fried, follow the directions for "Flipping or Turning Food."

Some recipes call for deep frying. The food is immersed in the hot fat. Several rules must be followed when deep frying. One must allow for the quick bubbling up of fat which occurs when a moist item is immersed.

Therefore, never fill the pot more than half full of fat. Use a pot with a flat bottom and a short handle so that it will sit firmly on the burner and will not be easily bumped. Heat the fat gradually so that any moisture in it will have evaporated by the time the fat reaches the required temperature. If the fat smokes it is probably too hot. To test for the proper temperature, immerse a one inch bread cube into the fat for 60 seconds. It should be brown at the end of the minute or else the fat is not hot enough.

To deep fry food, immerse it gently with long-handled tongs, a slotted spoon, or in a frying basket. Dip the utensil in fat first so the food will not stick to it when being immersed. The food should be as dry as possible after blotting with paper towels to prevent spatters and should be at room temperature so the fat temperature will not be lowered. Have a pan ready in which to rest the utensil when it is removed dripping from the fat. Time the food to decide when it should be turned over with tongs. When the food is done, remove and drain on paper placed in a pie pan.

* Jones, Sally, Kitchen Trade Secrets, Orientation Center for the Blind, Albany, Ca. 1966

FAT REMOVAL

To remove excess fat one can follow the directions in "Basting Food". Dispose of the fat in the spoon or in the baster rather than pouring it over the meat top.

> If the food will not be damaged by extra water, stir in ice cubes for about a minute. The fat will adhere to them and harden so that it will be removed with the ice cubes.
> One can float a paper towel on the top of soup or stew. The towel will absorb the fat and then it can be removed with a long handled fork. *

FLIPPING OR TURNING FOOD

This procedure requires a good memory. Slip spatula under food. Test to see that food is securely balanced on spatula by lifting slightly. If food is centered on spatula one will beable to tell by feeling the weight distribution on the spatula. Lift spatula end upward keeping spatula parallel to pan bottom. Spatula should be right above space left by food just removed.

Move hand over about 2 inches toward right.Trying not to move spatula in any horizontal direction, flip wrist over so palm is downward. This movement should turn over spatula end causing the food to drop off, raw side down, into the same space from which it was removed.

If the piece of food to be turned is too large to balance on a spatula, securely place fork prongs in left side of piece. Draw the piece straight upward so that right side of piece moves toward left side of pan. After drawing piece upward so that only right end is touching pan, move upper part of piece to the left and place back down in pan. Food should be resting in pan with raw side turned down.

* Jones, Sally, Kitchen Trade Secrets, Orientation Center for the Blind, Albany, Ca., 1966

FOLDING IN

The purpose of folding in is to combine an airy mixture with a heavier mixture without breaking down the air bubbles. Usually one folds beaten egg whites into a batter. The best tool is the flat of one's hand but a wooden spoon or spatula can also be used. Gently place the airy mixture in the center of the heavy mixture. Scoop up the heavy mixture from the bowl bottom, along bowl side and gently place on top of airy mixture. Repeat this motion turning the bowl each time until bowl has been turned 360°. Be sure that the strokes are gentle.

GRATING

Use an all-in-one grater which is flat. Two grating positions will be described.

One can place one end of the grater in the bowl bottom and hold the top handle of grater in left hand. With right hand place food to be grated at top of grating surface and move downward toward bowl bottom pressing food against grater surface at all times. Stop at bottom of grater and place food at grater top once again. Repeat until food seems too small to grate without harming fingers. Stick fork tines firmly into one end of food being grated. Try not to push fork tines all the way through the food as they may become bent or bend the grater. Hold fork firmly near tines end of handle. Continue grating while holding fork until food is grated.

Or, one may place the grater across bowl top with one end pushed against ones body with the left hand holding the far end placed at 12 o'clock. Take food to be grated in right hand and stroke from 12 o'clock along grater toward body to 6 o'clock. When reach end of grater, lift

food and return to 12 o'clock position. Repeat motion until food is grated, using fork as described in previous paragraph if needed.

KNEADING

The purpose of kneading is to develop the gluten. Air is incorporated into the dough so that it becomes lighter and increases in volume.

To knead, use a medium pressure with ones hands and work with a rhythm. Fold the dough from 12 o'clock to 6 o'clock and then press down and push away from ones body with heels of hands. Turn the dough a quarter turn and repeat motions. Knead until dough becomes smooth and elastic. One should feel air blisters just under the surface coating.

KNIFE CUTTING

Examine knife and notice sharp and blunt edges of knife blade. Hold knife by wrapping thumb and three fingers around knife handle and placing forefinger on blunt edge of blade with cutting edge turned down. To cut efficiently with a knife the blade must cut directly down toward the cutting board. The blade must be held perpendicular to the board. If it is not perpendicular to the board the knife will not cut well but will be ripping or smashing the food into pieces. The forefinger on the blade edge is used as a guide. When the edge felt by the forefinger is at an angle, one knows that the knife will not be cutting perpendicular to the board. If only the very blade edge is felt by the forefinger then the knife is in proper position to make a perpendicular cut.

KNIFE SHARPENING

To sharpen a knife it is easiest to use a purchased knife sharpener. An efficient and inexpensive sharpener is an Aladdin. The sharpener contains two whetstones which are placed at an angle to each other so that they form a "V" shape. For convenience the stones are housed in plastic. The unit is hung on the wall.

To sharpen a knife, place the blade in between the angled whetstones with the tip pointing toward the ceiling. Begin with the blade portion nearest the handle in between the stones and draw the knife downward until the entire blade has been drawn between the stones. Repeat this procedure several times keeping hands out of the way of the blade and the knife should become sharp.

LIQUID INGREDIENT MEASUREMENT

Identify which graduated measuring cup or spoon is the correct measure, at first by comparing sizes and later by knowing the shape by kinesthetic memory. Place measuring cup in soup bowl. Pour liquid into measure. Hold liquid container with right hand and touch spout with left hand fingers. Slowly adjust container position until left fingers touch measure and spout at same time. This procedure is done by direct touch and by shifting balance of the liquid.

Place left forefinger inside measure and pour with right hand until you feel liquid on fingers. When liquid and measure rim are felt at the same time, the measure is full. If liquid overflows it goes into soup bowl and can be poured back into liquid container. If liquid must be carried, leave the measure in the soup bowl and any liquid spilled will be caught in the bowl.

If recipe calls for a drop or two of a flavoring, measure the drops with an eye dropper. The cap of the vanilla bottle measures 1/4 teaspoon and can be used as a measure.

To measure hot liquid, measure liquid while cold and then heat. Remove from heat as soon as liquid is hot or else some will evaporate and liquid will not be full measurement.

MEAT CARVING

The meat should be examined before cooking to see where the bones are, which way the grain runs, and where there is excess fat. There are several ways to become familiar with the various cuts of meat. One is to read a cookbook which describes the various cuts. Another is to ask the butcher to explain where the bone and fat is in the piece being purchased. Ask to feel the parts he is explaining. Place baggies over the hands to keep them clean. Another way to become familiar with the cut is to personally examine it thoroughly before preparing it.

When carving, use a large knife with a long blade called a carving knife. Also use a large two-tined fork to help hold the meat steady while cutting. In general, meat is cut against the grain. Move knife in a long, light, pulling and pushing, sawlike action.

PAN PLACEMENT AND REMOVAL FROM OVEN

Place pan on stove top. Put oven mitt on left hand. Open oven door all the way and pull rack out half way with left hand. With pan in right hand, place pan on the rack and center it on the rack. Be careful not to put thumb in batter. Smoothly push rack back into oven with left hand, making certain the movement is not too rapid or else the pan may slip off the back. Close oven door.

To remove pan, put oven mitt on left hand and place pot holder in right hand. Open oven door all the way. Smoothly pull out oven rack with left hand. Pick up pan with both hands. Place hands on pan sides so that thumbs will not accidentally touch hot food nor leave holes in baked goods. Place hot pan on stove top. Push rack back into oven with left hand and close oven door.

PAN PLACEMENT ON RANGE

With burners off and cool, locate the burner on the stove top. Note the size and diameter of the burner. Place the pan on burner center. Place both hands around bottom of pan side. Feeling with hands, notice if pan edge is touching burner edge leaving the same amount of space all the way around the pan.

If the burner is preheated, place pan on burner. Take a long handled spoon in right hand and while holding pan handle in left hand, place spoon in a vertical position with its tip on burner edge. Touch the tip to burner edge at 12 o'clock, 3 o'clock, 6 o'clock, and 9 o'clock. Move pan so that it touches spoon handle at these four positions and the pan will be centered.

Turn pan handle toward inside of stove so it won't be bumped.

If more than one burner is going to be used then heat and use back burners first. Otherwise, it may be necessary later to reach over hot,full front burners to place pan on back burner.

PANCAKE READY TO FLIP

One way to determine whether or not a pancake is ready to turn is to time the pancake. If the griddle is at the proper temperature, a pancake will take two to three minutes to cook before it is ready to turn and another one to one and one half minutes to cook before it is ready to serve. The griddle is the proper temperature, if water dropped on the griddle will sputter and give off spasmodic sounds as it is bouncing around the griddle. If one hears the water boil when dropped, the griddle is too cool, and if one hears it rapidly steam and vanish then the griddle is too hot.

Another way to determine if a pancake is done is to slip a spatula under the pancake edge and let the edge drop to the griddle. If the pancake makes a "slap" sound, it is not ready to turn. However, if it makes a lower toned "thud" sound, the pancake is ready to turn.

To flip pancake, see "Flipping or Turning Food".

PEELING WITH KNIFE

Hold food to be peeled, such as a vegetable, upright with end resting on cutting board. With paring knife make small downward cut through skin. This cut will cut into the vegetable. After the first small cut, angle the knife so that the cutting blade is parallel with and close to the skin in an almost vertical position. Cut downward toward board following contour of vegetable. Place left hand thumb over skin being peeled to continually check for correct knife angle and to check for consistently thin peel. If peel should become thick it means the knife is slowly being turned toward the center of the vegetable or to a more horizontal position so angle the blade back until it is almost vertical again.

Continue procedure until vegetable is peeled. Check for bits of peel missed by knife. Soak vegetable in cold water and the difference between the skin and meat textures will be accentuated making it easier to feel the bits missed.

PEELING WITH PARER

Use a parer with movable blades. Place food to be peeled upright on cutting board, and firmly hold with left hand. With parer in right hand, place blade at top of food. Press firmly and move blade downward toward cutting board. Repeat all around until food is peeled. Feel for bits of peel missed.

One may use a Japanese parer which has blade perpendicular to, rather than an extension of handle. Place food on its side on cutting board. Place blade at 12 o'clock and draw toward body to 6 o'clock. Continue until food is peeled. Check for skin missed by parer. Soak vegetable in cold water and the difference between the skin and meat textures will be accentuated making it easier to feel the bits of peel missed.

PIE DOUGH

Handle the pie dough lightly to aerate it and to inhibit the development of gluten. Too much flour will toughen the pastry and too much liquid will cause the crust to be soggy. Too much shortening will cause a dough to be greasy and crumbly. Chill the dough after it is mixed to tenderize it to make it easier to handle and to keep it from shrinking during the baking. Remove it from the refrigerator at least an hour before use so that it will be at room temperature and it won't need to be overhandled.

A dark pastry cloth will be of help in rolling out the dough if one is partially sighted. A roller stocking on the rolling pin will help to keep the dough from sticking. The dough can be rolled between two pieces of waxed paper if the other equipment is not available.

Pat ball of dough into small, flattened circle. Place rolling pin in center of dough and roll out to north. Lift pin and place at center. Roll out to east and lift. Beginning at center, roll out to south and lift. Then roll out to the west from the center and lift pin at edge. Repeat this procedure until dough is desired thickness. Patch any tears rather than rerolling dough. To place dough in pan, lightly drape ends over rolling pin. Place rolling pin at pan center and "roll out" dough on pan. Gently, shape dough into pan and trim off excess with knife or scissors.

POURING

Notice size of container with liquid in it. Lift to see how full the container is. Notice where pouring spout is on container. Find opening of glass or dish into which the liquid is to be poured. Moving container with liquid in it, line up spout and other container opening so that spout can be moved in straight curve down to other opening. The container can be lined up by moving hand from spout to dish and back and down until hand moves in straight line from spout to dish. Keeping edge of liquid container nearest dish always on counter surface, slowly tip liquid container toward dish. Continually check with free hand to see that spout is aimed toward dish as container is being tipped. Pour liquid into dish until full. Check fullness by feeling with free fingers inside dish. Keep close control over liquid container at all times so one can stop pouring immediately if necessary. Be able to pour a slow steam of liquid. When dish is full, return liquid container to original resting position on counter surface.

If one is pouring a hot liquid, it may be difficult to use ones fingers in checking for the fullness of the dish. There are several ways to tell if a dish is filling. One can place the index finger just inside the container rim and feel the steam as the liquid nears the top. The sound will change as the liquid nears the top, getting higher in pitch. Place one hand on the container side and notice the temperature changes as the liquid warms the portion of the container which it touches. Notice the weight difference of the empty container and the filling container.

SCALDING

Scalding is the process of heating liquid to 180 degrees. It is most commonly used with milk. It will kill the bacteria and change the flavor. If a recipe does not call for scalding but only heating of the milk do not heat the milk to a high temperature since the heat will cause a change in taste that may be undesirable in the recipe.

To scald milk, heat the liquid until it almost boils. Little bubbles will form at the edge of the pan and will sound smooth. Do not boil the milk as it will scorch the pan making cleaning difficult.

SCRAPING

The purpose of scraping is to remove all food clinging to pan or bowl sides and bottom. One must run a spoon or rubber spatula over the entire area in an efficient pattern. This process requires remembering where the spoon has been placed each previous time. One must understand that matter flows downward. If a bowl is standing on a counter, most of the excess batter will be on the bowl bottom. However, if the bowl is tipped on its side to empty batter into a pan, most of the excess batter will be on the bowl bottom side -- that side which is closest to the counter top.

A rubber spatula is best for scraping since it is pliable and bends to bowl contours. Clean hands may also be used to scrape batter from bowls. Holding pan or bowl above pan into which the scrapings are to be poured, place bowl or pan on its side. If both containers are a comfortable size one may hold the bowl by wrapping ones arm around the bowl near its rim and resting the bowl on ones hip. It is easy to get ones clothes dirty this way. Another way of holding the bowl on its side is to grasp the bowl rim with ones fingers curled inside the bowl. This causes only messy fingers but requires prolonged muscular tension of the inside lower arm.

To scrape, place scraper near bowl rim at 12 o'clock and move downward toward 6 o'clock. When you reach the bottom side remove scraper and place at 1 o'clock and scrape down to 6 o'clock. Repeat motion at 2 o'clock, 3 o'clock, 11 o'clock, 10 o'clock and 9 o'clock. Keep scraper tip in firm contact with bowl during these movements. All batter should be collected at bowl's bottom side. Place scraper at bowl bottom side and move batter into receiving pan. When you finish this procedure, check bowl with fingers to see if all batter is removed.

SEARING, BROWNING

The purpose of searing or browning meat is to seal in the meat juices and to increase the flavor of the meat.

Be sure the meat is wiped dry. Place meat in hot pan. It should make a loud "sear" when it touches pan. If the sound is soft and not popping at all, the pan is too cool. At first the aroma will be that of the meat when taken out of the package - a raw odor. After a while it will change to a "brown" smell which falsely indicates the meat could be fit to eat (a mouth watering, appetite-awakening aroma). Notice the number of minutes it takes the meat to "brown". Turn the meat and allow it to "brown" on the second side for the same amount of time.

To prevent spattering the meat can be browned under the broiler. The meat will be brown when the top feels dry.

SHORTENING MEASUREMENT

If one is partially sighted and is able to see the measuring lines on a liquid measure, the liquid measuring cup may be used with food coloring in the water. If one half cup of shortening is needed, put 2 drops food coloring in cup bottom and fill cup with cool water to 1/2 cup mark. Immerse shortening lumps under water until water reaches 1 cup mark. Pour off water, making sure to shake out any excess drops.

One may also use a graduated measuring cup. Press shortening into measure remembering that air may become trapped between spoonfuls and so shortening must be pressed firmly to fill the air spaces. When the measure is full, level it off by taking a knife or spatula and with the flat edge, touching both edges of the measure, move it across the measure from one side to the other pushing off all excess shortening. To neatly remove shortening from measure, place spoon in center of shortening and touch tip to measure bottom. Run tap water until hot, then turn measure upside down and place measure bottom under hot running water. The heat will melt just enough shortening to release it in a solid form from measure. It can then be placed in rest of ingredients with the full amount of shortening on the spoon.

To measure butter or margarine shaped in a stick for table use, measure the width of ones forefinger or little finger. One of those fingers should be either one or two tablespoons wide. To measure the stick of shortening place the left forefinger or little finger across the top of the left end of the cube and slice down beside the right side of the finger to measure one or two tablespoons.

SIFTING

Place sifter on paper plate. Scoop flour out of canister and into sifter. Hold sifter a few inches above paper plate and sift at a moderate rate which must be learned. When sifted too rapidly, flour flies all over and causes sneezing.

Gently spoon flour into measuring cup or put cup on waxed paper and pour flour into it, bending paper plate slightly to make a funnel. Avoid smashing flour down. Always begin to scoop at the edge of the paper and always keep the spoon against the working surface when scooping flour into measure.

SLICING

See "Knife Cutting". Use a paring knife or a utility knife and a wooden cutting board. Cut perpendicular to board. Use free hand as guide to place knife across food to be sliced. Feel to see if knife will make cut of proper width. Can place thumb and forefinger on either side of blade to check thickness. When in correct position, press down on knife with even pressure and move smoothly forward and backward as you press, making sure not to turn knife but to keep it perpendicular to the board.

SPREADING

Hold knife or spatula sideways, gripping handle by wrapping thumb and fingers around it and placing forefinger on flat of blade. Put knife tip down into food to be spread and scoop up food on blade tip so there is large amount of food on knife. Place knife tip on center of food to be covered with the spread. Turn knife over and making sure that ones forefinger is on the flat of the blade, hold knife handle down low so that the blade is parallel to the area which will be covered with spread. Move knife blade from center toward edge of area to be covered. Move toward ones body. Turn food a few degrees, place knife at center and move toward edge. Repeat motions until piece has been turned in a complete circle and the area is completely covered with spread. Be sure to keep blade parallel to food or else the knife tip will leave holes in the food. Check around edges of area for excess spread or spills off edge.

To spread frosting on sides of cake or other three dimensional areas, dip knife in frosting and begin at place surface, scraping and pressing frosting upward to rim of cake.

TESTING FOR DONENESS

Many recipes instruct one to "cook until brown" or "cook until juice runs clear". The following list are some of the nonvisual ways in which various foods may be tested to see if they are done.

Bread, yeast - Remove the loaf from the pan and tap the loaf bottom. If it sounds hollow rather than dull it is done.

Bread, quick - Toothpick inserted into center should come out clean with no sticky dough on it.

Cake - Toothpick inserted into center should come out clean with no sticky dough on it. When one presses on cake it should spring back.

Cookie - It should be soft and not spring back when touched. If not soft it is over-cooked.

Custard - A knife inserted into dish should come out clean with no liquid on knife.

Dumpling - Toothpick inserted into center should come out clean with no sticky dough on it

Egg - The white should be firm. A knife inserted into the white should come out clean and not have liquid on it.

Fish - should flake easily with a fork.

Fruit - Largest or toughest part should be tender and pierce easily when a fork is inserted.

Gelatin - It should quiver when moved, not be rigid, and not be liquid feeling.

Liver - Should feel tender and not tough when pierced with a fork or else it has been over-cooked.

Meat - Unless cooked with moist heat, it should feel dry to the touch. If it is a cheaper, tougher cut of meat, it will be done when it feels tender and falls apart when pierced with a fork. Better cuts will feel firm when cooked to well done, and will feel soft but will spring back when cooked to medium rare.

Pasta - Bite with teeth and it should feel soft but slightly resistant.

Popover - Remove from pan and sides should feel firm.

Potato, french fried - When all sputtering of hot fat ceases it should be done.

Potato, hash browned - Place spatula under potato and scrape spatula edge across bottom of potato. If it feels soft, the potato is not done. If it is resistant to the spatula the potato is done.

Poultry - If a whole bird is being baked, it will be done if the hip joint feels loose when the drumstick is moved forth and back. Avoid piercing the skin if possible as it causes juices to run out and dries the meat.

Sauteed food - When put between teeth it is limp. If it is crunchy, it is underdone, if it is crisp it is overdone.

Souffle - It should be firm and set and a knife inserted should come out uncoated.

Vegetable - The largest or toughest part should be tender and pierce easily when a fork is inserted. To test corn on the cob, taste a kernel. If it tastes milky the corn is not done. It will be done when the corn kernel tastes cooked.

Waffle - It is ready when steam stops flowing out of the side of the waffle iron and when the top is no longer resistant to ones gentle pull.

White sauce - It will feel thick and smooth. To insure a thick but lumpless sauce, place it in a 350 degree oven for twenty minutes instead of stirring it constantly over a burner.

TOSSING

The purpose of tossing is to mix together ingredients which will retain their bulky shape but need to be distributed evenly throughout the mixture.

To toss, it is easiest to use ones hands. Reach down along bowl sides and move toward bowl bottom. Then bring hands up through mixture and turn them over as moved upward. This moves the bottom mixture to and through the top mixture. Repeat procedure using gentle motions until ingredients are evenly mixed.

II. GROOMING

GROOMING INTRODUCTION

In our society, good grooming is taught by emphasizing a consciousness of ones physical appearance. Many times grooming is taught to visually handicapped students with that same emphasis. While students should be aware of their physical appearance it is a rather meaningless visual term and so should not be the main goal when teaching grooming habits.

Aside from make up application, most grooming routines are performed for health reasons or for personal comfort. For example, nail care keeps ones nails in good condition, free from infection, and makes it easier and more comfortable to do fine work with ones fingertips. Hair care increases circulation making ones head tingle, and makes one feel fresher and cleaner since the pores are cleansed. Removal of underarm hair aids in daily cleansing of that area where the body continually deposits wastes.

Therefore, when planning grooming units for visually handicapped students, try to emphasize the increased good health and personal comfort they will achieve by following daily grooming routines and teach the importance of physical appearance as a secondary goal.

AFTERSHAVE CARE *

After shaving, rinse and dry thoroughly. A stinging sensation is an indication of a nick or cut. After area is thoroughly dry, pass fingers over the same area where smarting or stinging was located to see whether there is any stickiness or suppuration which would indicate bleeding. If bleeding is indicated, wet the pointed end of the styptic pencil with water and apply liberally to area.

To apply aftershave lotion, remove top of container and place in a secure location. Hold container in one hand; shake a small amount of liquid into the palm of cupped hand. Place container in a secure location. Rub palms of both hands together so that liquid will be equally spread in each palm. Apply to shaved area rubbing palms over the shaved area.

Apply talc by the same method as that used for applying lotion. Talc should be applied before putting on outer garments to avoid getting it on clothes.

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BLUSH APPLICATION*

A blush in stick form is easiest to use and control. Use swivel-stick blush in a light color and paper towel, or moist wash cloth.

Feel for cheekbones with fingertips. Put finger at outside corner of eye and then move straight down until touch cheekbone. Blush color belongs on the cheekbones, extending roughly from the center of the cheek blending away out toward the ear; color must never come below the level of the nostril.

Remove cap from blush stick. Do not swivel up. Place blush stick at the center of the cheekbone and swivel up until stick just touches the skin. Press blush stick lightly on the skin. With flat of fingers, blend blush upward and outward over cheekbone toward the ear. Repeat whole procedure on other cheek, remembering where blusher should be placed and how you blended the blusher. Recap blush stick. Wipe fingers thoroughly on paper towel or moist wash cloth.

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BODY HAIR REMOVAL

There are several ways to remove body hair. The use of a cream depilatory is the easiest, more expensive way to remove hair. A cream depilatory is a chemical and so should be used with caution. Follow the directions on the box which usually say to smoothly apply over entire area and let dry for 3-5 minutes. Then rinse off with warm water and washcloth. There is a regular strength cream depilatory which is used on more insensitive skin such as ones legs. There is also a cream depilatory which can be used on sensitive skin. Use only this second type of depilatory on underarms and face. Female facial hair should never be removed with shaver since it leaves stubble which shows and makes ones face unsmooth. Facial hair should be removed every 3-4 weeks.

A less expensive way to remove body hair is with an electric razor. However, a razor leaves stubble and so one must remove hair more often than with a cream depilatory. Shave in the direction opposite to the way the hair grows. If shaving ones legs, place electric razor with head flat against leg at ankle. Smoothly and slowly move razor upward to knee. Repeat this movement until you have gone around entire leg. Shave knee. Check for missed hair and stubble by moving free hand upward. Clean razor with brush when finished.

To shave underarms, lift arm straight up to 12 o'clock and then move it over to 1 or 2 o'clock and move arm back pushing shoulder joint out. This makes underarm area very smooth and wrinkle free. Begin at bottom edge of area and move slowly upward until a little beyond center. Repeat until lower half is clean shaven. Then place razor at upper edge of area and stroke downward to center, repeating

strokes until entire underarm area is clean shaven. Do not apply deodorant immediately as area may become irritated.

To shave a man's face, move in direction opposite to way hair grows.

Another way to remove excess hair is to use a double-edged hand razor. There is a double edged blade in the razor head. One should shave against the grain of the hair. To use a hand razor follow the directions below given for shaving a man's face.

Hold razor in right hand; grasp head of razor between thumb and index finder of left hand. (For the left-handed person right-left directions are reversed.) Turn knob on end of handle with right hand counterclockwise until jaws of head are completely open. Pick up razor blade dispenser with left hand, while still holding the razor in right hand, place right-hand thumb in opening of razor blade dispenser; press thumb down and push forward while keeping index finger of left hand on the end of dispenser to grasp blade as it emerges. When blade projects sufficiently, grasp it between thumb and index finger and pull from dispenser.

Hold razor head up, resting on right thumb and index finger with handle pointing down. Bring blade over top of open razor head and drop slot of blade over center bar. Check that it is in place by holding left index finger on one end and running thumb across center bar to other edge of razor head. While holding blade in place with left thumb and index finger at either end of razor head, twist clockwise at end of razor handle until blade is locked into position. Set razor aside.

Prepare beard by washing face with warm water and soap and rinsing thoroughly. Pick up aerosol container. Shake well and remove cap and set it in secure place. Cup left hand with middle finger in under spout. Press dispensing button with right index finger until there is a sufficient amount in cupped hand to lather face. Place can down. Apply cream to all areas of face and neck to be shaved. If necessary, add additional lather.

Pick up razor in right hand; place thumb and index finger at either end of head and curl other fingers around handle. Hold razor in this position through each step in shaving. Put left middle finger at sideburn line right side. Bring razor close to finger. Draw razor at an angle over cheekbone,working systematically down from sideburn line toward chin. For close shaving, shave against grain from jawbone upward toward sideburn line; get behind ear lobe.

Use upward sweep starting at chin crease toward edge of lower lip. Use same stroke over entire chin area. Use upward sweep starting at center of upper lip area. For neck and under chin start at collar line side of neck and move upward toward jawbone and end of chin. Repeat all over area. Repeat entire process on opposite side of face.

After each use, open razor head as described above, remove blade and set it in a safe location. Rinse razor and dry thoroughly by shaking and toweling. Replace blade as described above, without tightening completely. Return razor to cabinet on shelf.*

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CLEANSER APPLICATION *

Careful organization of routines and materials is of paramount importance. Arrange materials needed within easy reach and in the same order each time.

Paper towels, tissues, cotton balls, cleanser, freshener, emulsion, headband, make-up cape, and wastepaper basket will be needed.

Put on headband and make-up cape. Examine bottle to learn its characteristics so the nightly routine will become efficient. Open bottle and put cap in safe place, top down. Place palm of left hand flat against bottle top. Tip bottle over with right hand and squeeze half-dollar size portion into palm. Kinesthetic awareness of size difference will have to be learned as it is difficult to tell the amount. Place bottle down on table with right hand. Keep left hand holding cream level.

With index finger of right hand, take small amount of cleanser and apply to mouth using circular motion. Gently tissue cleanser off lips. Wipe index finger very thoroughly.

Spread remaining cleanser onto flat of fingers of both hands and apply in the following manner to a relaxed face: upward and outward from chin to ears, then across and up from nose to temples, avoiding eye area, and then upward from tip of nose to forehead. Next, make circular motions on forehead to temples. Move gently over eyelids from inner corner to outer corner, and gently under eyes from outer corner to inner corner. Make small circling motions around sides of nose, and circling motions on chin. Then stroke upward on throat. "Play the piano" under the eyes with gentle little taps of the fingertips to "exercise" the area and relieve puffiness. Tilt the head back and slap smartly under

jawline and chin with back of hand.

Take paper towel and wipe hands clean. Take fresh tissues and gently wipe cleanser off the face and throat, using same motions to remove as were used to apply. When cream is off, skin will feel smooth when felt with fingertips and not slippery or oily any more.

Discard tissues. With a fresh tissue, wipe around the face again, giving special attention to those areas where cleanser may have been missed the first time: under nose, at hairline, through eyebrows (tissue inward toward center of face, then back), and tips of ears. Discard tissues. Wipe around cap of cleanser to remove any residue. Replace cap on cleanser.

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CUTICLE CARE *

The cuticle is the skin growing at the edge of the nail on three sides. It is important to take care of the cuticle so that it will stay healthy and not produce hangnails. Use a cuticle remover which comes in cream and thick liquid form. Place the remover all around the nail edge. Work into cuticle with the flat end of an orange stick. Gently push back cuticle. Let remover stand several minutes and then remove it by washing finger with soap and water and a nail brush. Use same procedure as in "Nail Cleaning". Dry hands and gently push cuticle back with towel. The cuticle remover removes dead cells which stick to ones nail and softens the cuticle so it can be pushed back.

If hang nails do occur, they may be removed by using scissors. Open scissor blades slightly and place hangnail between the blades. Slowly close the blades and if there is no pain, then complete the cut.

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DEODORANT APPLICATION *

There are many types of deodorant-- cream, stick, roll on, liquid and spray. To apply, raise arm straight up and slowly stroke up and down over underarm area. Let dry before dressing or deodorant will be less effective and also will rub off on clothes leaving a stain which is difficult to remove. This procedure can be used with all deodorant types except spray. To spray, left arm straight up. Examine spray nozzle and point it toward arm. Spray up and down underarm area. Let dry before dressing.

EYE CREAM APPLICATION *

This fine textured but richly emollient cream is formulated especially for the delicate skin around the eyes. It helps minimize fine lines. Use eye cream in plastic jar. Use very sparingly. Apply after evening cleansing and freshening. Leave on overnight.

Take a very small amount on index finger of one hand and transfer some to index finger of other hand. Patting very lightly with fingertips, move gently over the eyelids from inner corner to outer corner, and gently under the eyes from outer corner to inner corner. "Play the piano" on the under-eye area.

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EYE SHADOW APPLICATION *

Cream eye shadow in a stick is the easiest, most mistake-proof method of application.

Touch lid with fingertip,tracing the area on which shadow is to be applied. Get advice from knowledgeable sighted person regarding area of lid to be colored. Remove top of eye shadow stick, standing it up so that it will not roll away. Swivel up (swivel moves to the right) 1/4 inch. Close eye. Talcum powder can be applied to be sure area is dry and not oily. Holding lid taut, with thumb held at outer corner of eye, stroke on the shadow, starting at the inner corner and working to the outer corner of the lid. Blend gently with fingertip to assure subtle effect. Repeat whole procedure on other eye. Replace cover of eye shadow stick. Wipe finger used for blending eye shadow with paper towel or moist wash cloth.

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EYEBROW MAKEUP APPLICATION *

Eyebrow make-up in pressed powder form is recommended because it is safer and easier to use than an eyebrow pencil. Women with dark eyebrows that do not require further definition do not need eyebrow make-up. However, they should groom the eyebrows with a small brush. The brush should be washed frequently.

Trace eyebrows with fingertips so that you are thoroughly familiar with the shape. Open box of eyebrow make-up. Touch tip of index finger to the pressed powder cake. Tilt head back slightly. Lightly trace line of brow with clean index finger of the other hand. Immediately follow with the finger that was touched to the eyebrow make-up, remembering how you stroked and at what pressure.

EYEBROW TWEEZING

This should be done professionally the first time to develop a line. One can feel stubble as it is growing out. Use blunt tweezers. Feel stubble with left hand keeping left hand up as a guard to protect the eye, place blunt tweezers in right hand. Move "against the grain" in finding a hair to pluck. Feel until a hair is in the tweezer. Close tweezer and pull, jerking out the hair.

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EYELINER APPLICATION

This is difficult to apply. Use eyeliner brush and practice with cool water until become kinesthetically aware of eyelid edge. Hold eyelid taut with left hand. Beginning at inner corner of eye, brush eyeliner in a thin line along lid edge, as close to lashes as possible, and stop before the outer corner of the lid.

FACE POWDER APPLICATION *

Powder is good for the blind client because it protects make-up and sets it for the day so she doesn't have to touch-up. Use a pressed powder compact in translucent shade.

Open compact. Wipe fresh piece of cotton over the powder. Always use fresh piece of cotton for each application. Press cotton on the palm of the other hand to further compress the powder. Now apply to face, patting lightly under nose, across forehead to temples, across cheeks, and over chin. Turn cotton to clean side and gently "dust" down the face.

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FOUNDATION APPLICATION *

Select a non-spillable, "mistake-proof" foundation in a plastic container. The new swivel-top make-up sticks are the easiest to use. Be sure foundation is applied lightly and does not get into hairline.

Remove cap from foundation stick. Examine swivel base. Turn swivel to the right to raise make-up. When raised, make-up should just clear the top of the container. To feel how high out of the container the make-up is raised, place index finger on top of the uncapped stick. Using very light pressure, apply small strokes of make-up across forehead, down nose, and upward on cheeks and chin, trying hard to remember where you stroked. Blend with fingertips of both hands up nose and sides of nose; across forehead (avoid eyebrows), up and out from chin across cheeks; across jawline; on mouth, and under nose.

Wipe off hands on paper towel or moist wash cloth.

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FRESHENER APPLICATION *

This "rinses" last traces of cleanser from the skin and gives it a refreshed, "toned" feeling.

Remove cap from freshener. Fold cotton in a small square, just large enough to cover mouth of bottle. Place cotton over mouth of bottle and invert bottle. Slowly move index finger of left hand away from bottle. This allows air into bottle and frees liquid to slowly drip out into cotton-ball. When freshener comes out air bubbles will vibrate the bottle slightly. Hold just until liquid is felt through cotton.

Apply moistened cotton to face in same upward-outward motions used in "Cleanser Application". Be sure to cover areas mentioned in cleansing that have a tendency to be overlooked. Pat face gently. Wipe hands on freshener-saturated cotton to remove any trace of cleanser. Discard cotton pad. Blot face with clean tissue.

Caps removed from bottles should be placed top down rather than on their sides so that they will not roll off table or out of reach. Used tissues should be discarded immediately. Freshener should never be applied too close to the eyes.

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HAIR BRUSHING AND COMBING *

To brush ones hair, place brush bristles at nape of neck near the right ear and draw brush up through the hair to the crown. Repeat vigorously in the same area several times. Moving brush away from ear toward center to neck, repeat total process. Hold brush in other hand for nape-to-crown brushing on other side of head. Place bristles at right temple and brush toward back of head several times. Repeat, moving brush toward center of forehead: take long strokes to the crown. Hold brush in other hand and repeat entire process for other side of head.

To part and comb a man's hair one should locate crown of head and comb hair straight forward. Starting from crown, draw comb tip forward, usually to about the center of the eyebrow on the side of the head where part is located. Place tips of four fingers of opposite hand in the line made by comb tip. Place teeth of comb along the line and draw the hair down the side. Repeat for other side of part. Run fingers along part line to see if part is straight. Hair may then be combed back as desired.

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HAIR SETTING *

To use rollers, begin at the crown of the head, separate a strand of hair as wide as the length of the roller. Place the roller at the end of the hair strand and wind it toward, or away from, the face, depending upon the style desired. Insert pin, or fasten clamp, to secure the roller. Block out the next strand of hair. Continue until the hair is completely rolled.

To make pin curls, place the index finger of one hand against the scalp where the curl is to be made. With other hand, wind a small strand of hair around the finger. Withdraw the finger and, while holding the curl in place, insert a pin or clip across the diameter of the curl. Direction and position of curls are determined by the hair style desired.

* Reprinted from Homemaking Manual, A Reference Manual for Home Teachers Working with the Adult Blind, by Staff of Community Services for the Visually Handicapped, Illinois Department of Children and Family Services, School of Graduate Studies, Western Michigan University, Kalamazoo, Michigan, 1966.

HAIR SHAMPOOING *

To shampoo hair set temperature of water, turning on cold and adding hot until desired temperature is reached. Check by putting inside of wrist under water. Hold shampoo container in one hand. Squeeze a small quantity of shampoo into palm of other hand. Set container aside. Rub both palms together to distribute shampoo.

Put head under flowing water and vigorously massage shampoo in all over head. Add additional shampoo if desired. Massage scalp and hair with fingertips. Not only does this clean the scalp but it increases the circulation too.

Rinse under tap thoroughly to remove shampoo. Repeat complete process to assure thorough cleanliness.

Wrap towel around head; squeeze hair so towel will absorb excess water. Replace cap container and return container to storage place. After washing hair, do not use a brush on it while it is wet but use a wide-toothed comb.

Shampooing time is a good time to clean ones comb and brush. Remove excess hair from brush by running comb through brush bristles repeatedly. Grasp comb teeth in one hand while holding comb with other hand and remove all hair from comb teeth and throw away. Hold brush in left hand and soap right hand. Massage bristles with right hand working soap into them. Make sure that the base to which the bristles are fastened is also soaped well. Rinse brush under running water and then swish it through vinegar water to cut any soap residue. Shake out brush over sink to remove excess water and dry with towel.

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To clean comb, use small brush made for that purpose. Wet comb. Soap brush and move it up and down comb teeth. Move it along teeth base. Rinse brush and comb under running water and swish comb through vinegar water to cut any soap residue. Shake comb out over sink to remove excess water and dry with a towel.

LIPSTICK APPLICATION *

Use light colored, creamy-textured swivel stick lipstick and tissue. The creamy texture will keep lips moist and soft and keep lips from getting dry and chapped. Trace lips with the tip of the index finger until you are completely familiar with their shape. Should feel three textures - face skin, ridge between lip, and lip skin. Uncap lipstick and stand cap on end (to avoid rolling). Roll up lipstick 1/4 inch by turning swivel at base to the right. With lipstick held in hand, rest the elbow at the edge of table and cup the chin in the hand. Open the mouth slightly. Upper lip: stroke lipstick from right corner of mouth to center; stroke on from left corner of mouth to center. Lower lip: stroke from right corner to center; from left corner to center. Replace cap on lipstick case. Blot lips with tissue if desired.

LOTION APPLICATION ON HAND AND BODY *

The lotion smooths the hands and other areas of the body which are likely to be dry. Lotion should be used on hands after each washing and, always, before retiring. Use hand and body lotion in plastic bottle. Uncap the bottle. Squeeze a little lotion into the palm of one hand. Put bottle down. Rub hands together to spread lotion evenly. Work lotion around the base of each nail. Smooth lotion down each finger and down back of hand to wrist, as if pulling on tight kid glove.

Daily, rub lotion into elbows and backs of heels. If body skin feels flaky or taut, after bathing, stroke lotion sparingly over the legs, arms, and body and smooth in well.

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MASCARA APPLICATION

Use the type which is applied with a rod. Wipe rod off with tissue. There will be enough mascara left on brush to apply to lashes. Hold rod in right hand and place left hand finger at rod tip. Lead right hand up to lashes with left hand. Bat lashes and they will stroke against rod brush. Wipe under eyes with tissue when done.

MEDICATED BLEMISH CREAMS AND LOTIONS APPLICATION *

Use this to dry and heal acne pimples. If the problem persists, consult a dermatologist. Apply after cleaning and freshening. Leave on overnight. Apply again after morning cleaning. Most blemish treatments are complexion-colored so can be worn during the day under or without makeup. Use medicated blemish treatment in plastic tube or jar.

Place small amount of medicated blemish cream on index finger. Touch to any pimple, or smooth on blemished areas.

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MOISTURIZING EMULSION APPLICATION *

These smooth, quickly absorbed lotions are designed to be worn under make-up (or without it) as invisible day-long beauty and protection treatments. Take care that moisturizer does not get into hairline. Use very sparingly. Will need moisturizing emulsion in plastic bottle or jar.

Uncap bottle or jar. Place two fingers over mouth of bottle, thumb under bottle, and shake. This brings the moisturizer to neck of bottle. Turn bottle upside down until emulsion is felt on fingertips. Apply dot of moisturizer on forehead, tip of nose, chin and each cheek. Recap bottle. Transfer remainder of moisturizer on fingertips to other hand and blend on face in upward motions using same technique as in "Cleanser Application".

NAIL CLEANING

To clean fingernails use a nail brush which is a small brush with stiff bristles. Wet the brush and rub it across the top of a soap bar. Hold fingers so the nails are in line with each other. Firmly brush up and down from nail tops to nail bottoms several times. This cleans nail tops and edges where the cuticle meets the nail. Brush firmly across fingertips several times feeling bristles under nails. This procedure cleans under the nails where dirt easily gathers.

This same procedure can be used for cleaning toenails. The nail brush is also good for cleaning knuckles.

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NAIL POLISHING

It is very difficult to polish nails. Since nails have no nerves or muscles kinesthetic awareness is difficult. Polish makes it difficult for a nail to breathe. Buffing encourages nail growth and adds a sheen to the nail.

To polish nails, first apply vaseline around cuticle. Tissue any vaseline off nail itself. When clean, carefully brush polish on nail beginning at bottom and stroking to top. Let polish and vaseline dry for an hour. Remove vaseline and excess polish on skin will be removed also. A clear or natural colored polish in a spillproof bottle should be used. Do not use frosted polish as it eats the nail away.

NAIL TRIMMING

There are several ways to shorten nails. Different tools may be used for different purposes since finger nails are shaped in an oval and toe nails are cut straight across.

A curved-blade scissors can be used to cut nails. They are easiest to use if nails are softened by soaking in warm water. To cut fingernails, begin at right side of finger and place nail between scissor blades and cut smoothly in a curve shape following line of finger tip from right side to left side. To cut nails of right hand cut from left side of nail to right side. To cut toenails with curved-blade scissors, place nail between scissor blades and smoothly cut straight across toe from right to left.

A nail clipper will work more efficiently if nails are softened by soaking in warm water. To cut fingernails with a nail clipper place right edge of nail between clipper blades. Be careful not to put too much nail

in clipper as it will cut the quick of the nail which is painful. Clip the right side and left side of the nail following finger tip contour. To clip toenails, use same technique except clip in a straight line.

A very sharp knife may also be used to trim nails. The nails should be softened by soaking in warm water. This method can be used on both fingernails and toenails. Place knife blade parallel to finger or toe tip at left side of finger or toe nail. With right thumb on right side of finger or toe smoothly cut across nail following curve of finger or toe.

An emery board or metal file may be used to trim nails by grinding the nails away through abrasion. The nails should be dry so do not soak them in water. Both an emery board and a metal file have a coarse side and a fine side. Use the coarse side to sand down the nail rapidly and use the fine side to smooth and finish the nail.

To file, place file at left side of finger and file toward fingertip center. File in one direction only, from finger side to finger center. If one files the wrong direction the nail may split and bleed. Repeat procedure until nail is shortened. Then place file at right side of finger and move toward fingertip center. This will be a sort of pushing motion while the other was a pulling motion. File in one direction only and repeat until nail is shortened and a pleasing shape. Feel for roughness. If any roughness is felt, lightly repeat procedure with fine side of file.

NIGHT CREAM APPLICATION *

This cream counteracts dryness, lubricates,smooths, and softens skin, and helps ward off lines and wrinkles. It is especially important for dry and sensitive skin. Use after cleansing and freshening.

Use night cream in plastic jar. Night cream should be applied about half an hour before retiring so that most of it will be absorbed by the time you go to bed. If not, you have used too much. Touch the skin, if it feels slippery, blot the skin gently with a tissue to remove excess. Cream should be absorbed in 20-40 minutes.

Take a little night cream on index finger. Place dot of cream on nose, chin, each cheek, and forehead. Smooth night cream over face, using motions described in "Cleanser Application".

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ORAL HYGIENE *

To brush teeth, remove cap from tube and place in a secure location. Grasp bristles of brush, which are turned upward, between thumb and index finger of one hand; make sure that bristle tops are slightly below the holding fingers. Curl other fingers around brush handle. With tooth-paste tube in other hand, place tip of tube between tips of fingers holding brush. Squeeze bottom end of tube gently until paste has covered top end of bristles. Remove tube, Brush teeth. Rinse brush and place in holder. Rinse mouth thoroughly until all dentifrice is removed. Replace cap on tube and store.

To use dental floss, pull nine to twelve inches of floss from container and cut off. Secure dental floss around end of one index finger. With other hand, grasp securely so that floss can be pulled taut. Place floss between two teeth. Pull floss back and forth in a sawing motion, making sure the space between two teeth has been thoroughly cleaned. Do not cut gum. Remove floss from aperture and repeat procedure between all teeth in a sequence.

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III. HOME MANAGEMENT INCLUDING CHILD CARE

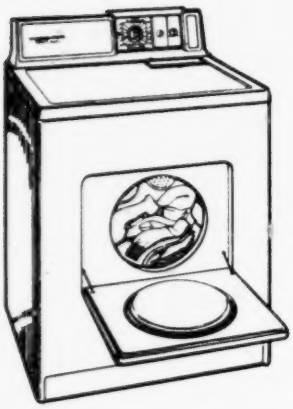
HOME MANAGEMENT INTRODUCTION

This section deals with the appliances and activities which are a part of managing a home. Also included are the techniques used in caring for a baby. The items described are arranged in alphabetical order with the noun first and the action verb second. Therefore, if one needs to clean a bathtub, look under "Bathtub" and not under "Cleaning". Several of the headings may sound strange but it is hoped that it will be easier to find specific techniques using this arrangement

When teaching some of the following techniques that take many steps to complete, consider using a "reverse task analysis" approach. The end product is shown first and then the last steps leading to the end product. That way the preceding steps seem to make more sense and are easier to understand.

When teaching the various cleaning techniques included in this section, the student must have an understanding of his body in space before he can successfully clean an area without aid. Without proper spatial orientation, he may be able to follow the directions in the following pages but he may miss sections of the area to be cleaned. Spatial orientation is necessary if a student is to understand which area he has finished, which he is doing presently, and which area he has to complete. Without spatial orientation he will be inefficient and will clean some areas twice and other areas not at all. Spatial orientation is also necessary for ironing.

CLOTHES DRYER



A. DESCRIPTION

The clothes dryer is a four foot square machine with a door opening to the left or the right on the front side. Inside is a large cylinder which moves clockwise to toss the clothes in heated air. At the back edge of the dryer top is a control panel. There is an on-off button, a temperature sele tor, and a time control dial. On the door, near the dryer bottom, or near the control panel is a lint filter which catches all excess lint on the drying clothes. This filter can be removed for cleaning.

B. SAFETY

There are no unusual safety features.

C. ADAPTATIONS

The controls can be marked with marked dymo tape or with white glue dropped over the numbers which will dry raised and can be felt.

D. MAINTENANCE

The lint tray should be removed after each cycle and the lint disposed. The outside of the dryer should be wiped periodically to remove any accumulated dust.

E. ORIENTATION

Find the door and open it. Examine the cylindrical drum where the clothes are placed. If the lint filter is in the door, see how it is removed and replaced. Shut the door and turn the handle to lock the machine.

Find the control panel. Find the temperature control. Be able to move the dial or button to low, medium, high, and air. Find the time control. Move it clockwise to 45 minutes, 25 minutes, and 10 minutes. Find the off switch and be able to push "on" and push "off".

CLOTHES WASHER

A. DESCRIPTION

The washer is a machine four feet square with a lid on the top which opens from the right and swings to the left. Near the opening there may be a small hole in which to place bleach. Inside of the machine there is a large cylindrical drum with an agitator in the center. The agitator is a large thick column rising from the bottom of the drum and having blades projecting out of it. When the machine is turned on, some agitators move half a turn clockwise and then a half turn counterclockwise while other agitators move up and down. Both types of agitators move continuously with a rapid motion to beat the dirt out of the clothes.

There is a second type of washer which loads from the front rather than the top side. The inside is a cylinder which rotates in a clockwise motion much as the clothes dryer, and tosses the clothes to remove the dirt.

There is a lint filter which collects lints from the clothes. The filter can be removed and the lint discarded

At the back of the top side is a control panel with dials or buttons. One control is the setting for the wash temperature, another for the rinse temperature, another for the various agitation speeds, and a time control with an on-off switch.

B. SAFETY

There are no unusual safety features.

C. ADAPTATIONS

The controls can be marked with marked dymo tape or with white glue dropped over the numbers which will dry raised and can be felt.

D. MAINTENANCE

The lint filter should be removed after each cycle and the lint discarded. The outside of the washer should be wiped periodically to remove any accumulated dust. The inside of the washer should be cleaned after dyeing clothes to remove any excess dye.

E. ORIENTATION

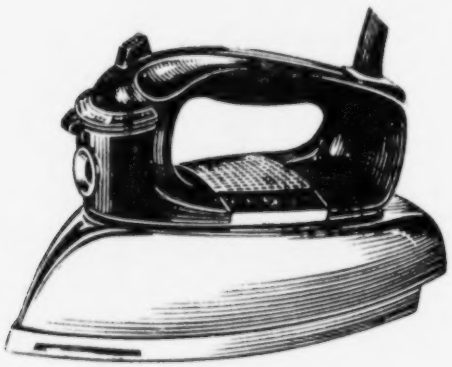
Locate the door to tub at either top or front side. Open door and look to see if there is a hole in which to place the bleach. Follow the manufacturer's instructions when using it. Examine the tub area noticing now large it is and how many clothes can be washed efficiently in that space. Examine the agitator if it is a top loading machine and notice if it moves up and down or around. Close the door and find the control panel at the back of the top side. Notice where the panel is in relation to the door handle so it will be easily found when washing.

Locate the wash water temperature setting. It is usually on the left side. It may be either a dial or a butt on. Be able to turn it to cold, warm, and hot by pressing the proper button or by turning it counterclock-

wise. Next, locate the rinse water temperature setting which is beside the wash temperature on the right. It too will be either a button or a dial. Be able to turn it to cold, warm, and hot by pressing the proper button or by turning it counterclockwise. Locate the agitator speed control. It will usually be two buttons. Be able to set the control for regular and for delicate agitation. Locate the time control which is usually on the right side. Be able to turn it counterclockwise to 12 minutes wash, 8 minutes, and 2 minutes. Locate the on-off switch. It may be a button near the time control or it may be part of the time control in which case one must pull out on the dial to turn on the machine and must push it in to turn off the machine.

Locate the lint filter and be able to remove it, clean it, and replace it.

IRON



A. DESCRIPTION

An iron is a small, compact appliance with a smooth flat bottom which heats to a very high temperature to press clothes smooth. It has a heat proof handle on top and temperature settings within finger reach. The front end is pointed for easier ironing and the back e has a small ridge so iron can be tilted up and rested on this hea when hot. The cord is connected to iron at the back of one side.

B. SAFETY

Since the iron bottom becomes very hot, do not touch it. When ironing the hot bottom will be on board so one is protected from the heat. When not ironing, rest iron on its heel and face bottom away from body. When clothing on ironing board is ready to iron, move hand along board edge nearest body until reach cord. Since cord is at back side of iron, it is a safe place for ones hand. Move hand up along cord until reach iron side. Then move hand to handle.

C. ADAPTATIONS

The temperature control may be marked at each setting with raised dots which can be made by applying drops of white glue which will dry raised and so can be felt tactually.

D. MAINTENANCE

Let iron cool before putting away. Check occasionally for fraying cord or loose connections. Occasionally check iron bottom to see that it is clean. If it has starch stuck to the bottom, rub iron into bed of salt while it is turned onto low temperature.

E. ORIENTATION

Examine iron and notice the large heatproof handle on top. Place the right hand on the handle. Notice how close the temperature control is to the hand.

Feel the front end of the iron which is pointed. This end moves into garment first and so the point makes ironing easier. Notice back end of iron which is straight. This end is called the heel rest. Turn the iron up so the bottom plate is perpendicular to the board and the iron will rest on this heel. Notice that the cord is attached to iron near the heel on the right side. When the iron is hot use this cord for finding the handle rather than groping for iron and burning ones hand on the hot area.

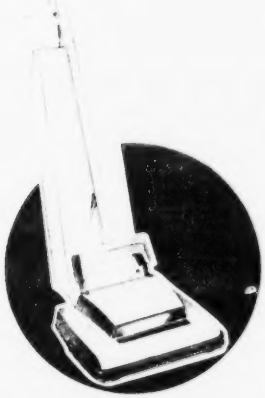
While iron is resting on its heel examine the soleplate. This is the part of the appliance which heats for pressing. It will be a very smooth metal unless the iron is a steam iron in which case there will be holes in the plate which are steam vents.

Find the temperature control near the handle. The control will be a movable tab which moves in a clockwise direction. The temperature control will begin with off at 9 o'clock and move to low or synthetics at 11 o'clock, wool at 1 o'clock, cotton at 2 o'clock and linen at 3 o'clock. Practice

moving tab until you can set any temperature on iron.

To fill the steam iron with water, fill a plastic baster with water and insert the baster end into the water hole which is located near the temperature control. Squeeze the baster and the iron should fill with water and no spills occur.

VACUUM CLEANER



A. DESCRIPTION

A vacuum cleaner has a motor which turns brushes and rapidly sucks in air. The brushes beat the flooring causing dirt to loosen and move upward to be sucked into the vacuum cleaner. The dirt then flows to a large bag housed in the vacuum cleaner, where it is held until it can be removed and discarded.

There are two types of vacuum cleaner. The first is called an upright. The motor and brushes are contained in a unit which moves along the floor on wheels. A handle projects four feet upward perpendicular to the floor unit and has a bag attached to its backside. The handle can be moved back and forth from its perpendicular position so that one can maintain a comfortable upright posture when vacuuming with this type of cleaner. The on-off switch is located near the handle top.

The other type of vacuum cleaner is called a canister. It is smaller and lighter weight so that it moves around easily. The motor, blower, and bag are on wheels but the dirt is sucked up through a long flexible hose which protrudes from the base. Several hollow metal pipes are attached to the hose at its other end. At the end of the pipes is a place to attach a brush. The flexible tube allows one to stand upright while cleaning. The pieces are all detachable for easy storage. There are five different attachments used for cleaning; a large brush for smooth flooring, a small brush for dusting furniture, a large smooth tool for carpets, a small smooth tool for upholstery, and a smooth piece with a narrow opening for cleaning crevices.

B. SAFETY

There are no special safety features.

C. ADAPTATIONS

There are none.

D. MAINTENANCE

When finished with the vacuuming using a canister vacuum but while motor is still running, remove brush from hose and run hose across brush several times to remove any dirt or lint from brush. When finished with vacuum, turn off motor, remove bag, and dispose of dirt. Wipe off surfaces of vacuum cleaner periodically to remove any dirt.

E. ORIENTATION

If the vacuum is an upright, locate base containing motor. Turn over and notice how the brushes rotate. Return to proper position. Locate cord outlet. Find handle and locate on-off switch. Be able to turn switch to "on" and "off". Move handle back and forth to find position that is most comfortable. Locate bag and feel to see how full or empty of dirt it is by squeezing the bottom near the base. Be able to detach bag from

cleaner. It is attached to the handle top by a spring fastened on a hook. Unhook. It is fastened at the base with screws. Unscrew the screws and remove bag.

If the vacuum is a canister, examine base and find cord outlet. Locate the on-off switch and be able to turn it "on" and "off". Locate hose outlet on base. Attach hose by placing in hose outlet and turning it until it clicks. Attach metal pipes to hose by pushing into hose end. Attach one of brushes by pushing into pipe. Find button on base which opens top of base and exposes bag. Be able to remove bag by detaching from base, empty, and replace it in base.

To use vacuum cleaner, see "Vacuuming".

BABY BATHING *

Check to make sure that the room and all equipment are ready before the baby is undressed or removed from his crib. Wash hands thoroughly before handling the baby. Lift baby out of crib, providing support to his back and his head with your arm and hands, and place him on the bath pad on his back. Remove all clothing except his shirt and his diaper, both of which are needed for warmth.

While holding baby's head still, clean the baby's nostrils with a small moistened cotton swab. Use a separate swab for each nostril. To clean eye area, move from forehead to bridge of nose and using eyebrow as a guide, wipe from nose out. Gently stroke eyelid with a sterile, moistened cotton ball. Use different ball for each eye.

Test temperature of bath water on inside of the wrist; it should be comfortably warm. Wash baby's neck using soft washcloth and baby soap, washing on the outer part of his ear and behind it. Give particular attention to the folds of skin in which moisture, lint, and dirt may accumulate. Rinse and dry neck area gently with soft towel. Place arm under the baby's back with one hand behind his head. With the other hand, wet the head and wash with baby soap using circular motions. Rinse head with rinsed washcloth by using gentle stroking motion. Dry baby's head gently with soft towel.

Remove baby's diaper and shirt; wet and soap washcloth which is held in one hand. Beginning at the baby's chest and arms, using firm, gentle continuous strokes, with soaped cloth go over entire front of body, washing all folds and creases. Rinse and dry front side of baby's

body. After front part of body is washed and dried, turn baby over and wash back. Rinse and dry back of baby.

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BABY DIAPERING *

Select suitable place to diaper baby Assemble necessary equipment. Place baby on bath pad and remove necessary outer clothing. Place baby on his back. Remove safety pins from diaper and place in bar of soap, wax block, or in other secure place Gently grasp both ankles in one hand and lift baby's buttocks slightly off the bath pad With free hand, remove diaper by gently reaching between his legs with your fingers to grasp the edge near his navel. If the diaper is soiled from a bowel movement, take care to fold the diaper before placing it in rustproof cover pail.

Wipe baby with warm damp cloth If a change is necessary because of a bowel movement, wipe well with tissue then use a soft cloth and clear, warm water to clean the baby's buttocks while you still have him gently grasped at the ankles Before placing clean diaper on the baby, release ankles and apply a small amount of power or oil using cotton balls as applicators, on the areas covered by diaper to prevent diaper rash. Wipe off excess with tissue. Place used cotton balls and tissue in waste disposal bag.

Slip folded diaper under the buttocks of the baby so that the extra-thick fold is placed on the front of the boy baby to catch the urine; on the front of a girl baby if she sleeps on her stomach; at the back if she lies on her back The top of the diaper under the baby should be just above the point where the buttocks begin.

The fold will change as the baby grows For the new baby, a rectangle seems to create less bunching between the legs Fold your diaper so that you make it oblong, three layers thick with an additional foldover at one end

Lift the free end of the diaper between the baby's legs and lay it flat across his stomach. Pin by bringing the corners from under the baby forward. Lap over and pin on both sides. Always insert your fingers between the diaper and the baby's body when pushing a pin into the cloth.

BABY FEEDING

Place food on table near baby. Sit behind baby. Find bowl of food with left hand and scoop up spoonful with right hand. Place left hand on baby's mouth. Bring right hand to baby's mouth and place food in his mouth. When spoon is empty, return spoon to bowl and repeat procedure.

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BASIN CLEANING *

Remove all items from around sink area. Wet sponge. Holding sponge in one hand and powdered cleanser in the other, invert can directly over sponge and shake up and down until there is a generous amount of cleanser on sponge. Using a circular motion, start on drain area, rubbing sponge over entire area, giving the soap dish area, drain and faucets special attention. Rinse out sponge under running water.

Use circular motion with sponge for cleaning and rinse several times until excess cleanser has been removed. Check surface tactually for cleanliness. If any rough spots are found, repeat cleaning process. Polish faucets with dry cloth and paper towel. If basin has legs, clean them with wet sponge or paper towel.

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BATHTUB CLEANING *

Kneel at center of outside of tub facing wall side of tub, which will allow for cleaning entire tub without excess stretching. Remove all items from tub, such as bath mats and brushes. Wet sponge with warm water and, without wringing it, wipe inside of tub. Rewet sponge and squeeze it gently but not removing all the water. Holding sponge in one hand and powdered cleanser in the other, invert can directly over sponge and shake up and down until there is a generous amount of cleanser on sponge

Start at an orientation point (drain end of tub). Use circular motions vertically from top to bottom. Move guide hand sideways and repeat process in each small section until circumference of tub has been cleaned. Clean bottom section of tub starting at the end opposite from faucets. Use the same system of small circular motions sectioning the bottom horizontally. Repeat entire process, adding cleanser to sponge as needed and rinsing sponge lightly until the faucet end has been reached. Rinse out sponge under running water.

Rinse tub with sponge three or four times using circular motion over entire surface in order to remove excess cleanser. Check tactually to be sure cleanser is completely removed. After the inside of tub has been rinsed thoroughly, use a slightly damp sponge and go over entire surface of tub using circular horizontal motions to remove all excess water. Clean faucet and valve handles with cloth or paper towel.

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BEDMAKING *

Unfold the sheet on the bed. Find the large hem and align it with bed head. Smooth sheet. Index distance from floor to edge of sheet, using leg for measuring. Grasp sheet toward top and toward the bottom. Pull gently and evenly toward side of bed. Check measurement as above. Walk to other side of bed and repeat measuring technique. Repeat these steps until distance of sheet edge from floor is equal on both sides. Equalize sheet length at head and foot of mattress.

Fold top hem under top of mattress using a hand-width length of sheet under the mattress. Walk to foot of bed, pull gently, and smooth sheet. Tuck the same length of sheet under the foot of mattress as was tucked under the head of mattress. Tuck sides giving particular attention to neatness of corners.

Repeat for other side. Place top sheet on bed with raw edge of hem up. Center sheet on bed. Allow ample length at the foot to tuck under and enough at top to turn back over covers. Bring top hem up to headboard.

Place blankets on bed about 12 inches from the head. Tuck covers under at foot and foot corners. Fold top edge of sheet over blanket. Center the spread; work from bottom to top, fold back at blanket line; lay pillow against headboard with fold of spread under pillow. Bring spread up and over pillow to cover it. Tuck excess, if any, between pillow and headb oard. Straighten and tighten spread by putting excess neatly under the pillow. A well-made bed will need only to be straightened between changing sheets for laundry.

To put pillow case on pillow, align pillow case with edge of bed. Insert thumbs inside of mouth of pillow case at pillow case seams or fold.

Tuck pillow under chin; work pillow case over bottom end of pillow and work it up toward top of pillow. Shape pillow the rest of the way into the case. Replace pillows at bed head. Place spread over pillows as instructed in the paragraph above.

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DISH WASHING MANUALLY *

Prepare pots and pans. Scrape excess food off of pans and wipe out into garbage with paper towels. Wipe excess grease from skillets and roasters with paper towels Prepare burned pans by filling with water and baking soda and allowing them to boil gently. Soak pots and pans.

Scrape each dish before putting it in sink for washing. Hold a thick pad of paper towels in one hand while holding the soiled plate over waste receptacle in the other hand. Wipe plate, starting at point where plate is held. The plate should be in approximately a 45-degree angle into the receptacle so that waste will fall freely. Follow this procedure with each plate and stack plates uniformly. Transfer leftovers from serving dishes into covered containers for appropriate storing.

Pour water from pots in which they have been soaking. Place pots aside on counter. Fill dishpan to about one third of capacity with hot water. Add sufficient amount of dishwashing detergent.

Wash glassware individually. Hold glass in one hand and a sponge in the other hand. With glass in dishpan, the sponge should be thoroughly saturated with water from dishpan and placed inside of glass. Rub in a circular motion, making sure that the sponge reaches the bottom of the glass. The outside of the glass should also be washed with sponge, using a rotary motion. Rinse glass and place in dish drain. Follow same procedure for all glas-ware. Wash cups in same manner as glassware.

Immerse saucers, plates, and serving dishes in dishpan and allow to soak for a few minutes. Hold edge of saucer or plate between thumb and index finger of one hand and with soaked sponge in the other hand, rub plate with sponge inside and outside in circular motion, making sure that all areas have been thoroughly covered. Rinse each article with hot water

and explore all surfaces for food particles. If thoroughly clean, place in dish drain. If not, repeat washing procedure.

Flatware should be placed in dishpan and each piece washed with sponge. Hold flatware by handle between thumb and index finger of one hand and fold saturated sponge around each piece. Rub from end to end. Care should be taken that the folded edge of sponge is placed on the back edge of knife.

Remove water from dishpan. Rinse pan well. Refill with water to approximately one third capacity and add detergent. Place pot on its side in dishpan. Hold handle of pot in one hand; take sponge or scouring pad in other hand and rub all areas of inside of pot. Turn pot as far as hand will allow in order to cover all sections of intersurface. Scour outside of pot with sponge or scouring pad, giving special attention to outer bottom of pot. Small circular motions successfully clean outer bottom of pot. Remove pot from dishpan and rinse thoroughly in hot water.

Pots should be thoroughly explored with the fingers, particularly in the inner portion, for food particles. If pot appears to have any soiled spots, repeat cleansing process. Teflon-coated pans should be washed according to manufacturer's instructions.

After all articles have been cleansed, scour and rinse the sink. If stainless steel sink is used, follow manufacturer's instructions for cleaning.

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DUSTING *

Approach area so that back of hands touch front edge of surface to be dusted. Standing at left side, without cloth in hand, start at one end and place finger tips of both hands at front edge of table. Palms should be down, fingers extended and comfortably spread apart, and thumb tips touching and hands relaxed. Move hands carefully forward toward opposite side removing any objects encountered along the way; set objects in a safe place, for example, under the furniture. Reorient yourself to the spot where you left off and proceed, moving hands to opposite side. Move one side step from left to right and repeat process for clearing table of objects. Continue this procedure until the entire surface is cleared.

Grasp cloth fold to hand size in one hand with fingers comfortably spread apart and extended. Hold a container, such as a bread pan or cake pan with other hand, just under front edge of table; make sure that container is in contact with under surface. Stand with right side of body next to front edge of table, keeping container immediately in front of body and in contact with the table. Place hand holding cloth on surface at back edge of table, keeping cloth in contact with surface, and draw hand forward until front edge has been reached, thus pushing crumbs or dust into container. Move one hand-width over and follow this procedure until entire surface has been cleaned. Put container in a safe place.

Place hand holding cloth on front edge of surface, keeping cloth in contact with surface, and proceed to back edge using a circular motion. Move hand over one hand-width and repeat process. Continue this procedure until surface has been completely dusted. Return objects removed from table.

To dust legs and rungs of tables and chairs, maintain body in a position convenient and comfortable to area to be dusted. Wrap dust-cloth around upper part of leg or table or chair. Grasp the cloth firmly in one or both hands and move it downward. Repeat this motion three or four times. Use same method for rungs of table or chair making sure that the process begins at either end of rung.

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Clean the floor as described in "Sweeping". Remove as much furniture as possible. Use the immobile furniture and the walls as reference points and divide the room into sections for orientation. To wash the floor it would be helpful to be barefoot. Then, if the surface feels dry, it hasn't been washed and if the surface feels covered in pools of water, then the water was probably spilled and it needs to be wiped up. If the surface feels damp then that portion of the floor probably has been washed.

Begin at the outer edge of the first section and move the mop in a forth and back motion across the floor as far as the arms will comfortably reach. Take a half step sideways and repeat the motion until a strip the full length of the section has been covered. Step backward a half step; repeat motion working back to point of origin. Continue in this way until the section has been covered.

Continue on to the next section, overlapping each area as it is cleaned. Work backward toward the door until each section has been covered.

After the floor is completely dry,it can be waxed. There are several types of wax. First, there are polishing and self-polishing waxes. If a polishing wax is chosen it will need to be buffed as it dries to a dull finish. This wax type protects floors but can be removed easily when floor needs to be rewaxed. Self-polishing wax is exactly that so buffing is unnecessary. However, this wax type wears off quickly in high traffic areas, it builds up with new applications, it tends to yellow, and it is more difficult to remove when the floor needs to be rewaxed.

Second, there are water-base and solvent-base waxes. Follow the manufacturer's instructions in choosing the wax which is best for the particular floor being cleaned or else the flooring may be damaged.

Wax comes in two forms, liquid and paste No matter which form is used. apply the wax sparingly or else the floor may become slippery. To apply wax in paste form, use a brush or steel wool pad and spread small amounts in straight lines or with the grain of the wood. Be sure to spread it evenly. To apply wax in liquid form, pour wax on floor in two-inch pools and spread evenly in straight lines or with the grain of the wood. Rub the wax well into the floor.

Apply the wax in sections as was done when washing the floor. The floor should be divided into smaller sections so it will be easier to apply an even coat of wax. It will be easier to remain oriented correctly if the wax is applied by hand on ones hands and knees Begin with the first section and sparingly apply wax, rubbing it in, in straight lines or with the wood grain. When the first section is coated evenly, move to the next section and try to apply wax just up to and not overlapping the first section in an effort to keep the floor evenly coated. The first section should feel damp or tacky when lightly touched with the hand. Move the hand with the applicator up to the hand touching the first section boundary. Repeat the motions until the entire floor has been evenly coated with wax. Let it dry and apply a second coat if needed or buff with an electric buffer following the manufacturer's instructions.

FURNITURE WAXING AND POLISHING *

Clear and clean area as described under "dusting". Remove cap from polish container, and place in a safe location. Fold cloth to hand size; hold in one hand. Place cloth over open mouth of container and invert container once or twice. Remove cloth from container opening. Place cloth on surface to be waxed, moistened side upward. Replace cap on container and set aside in a safe place.

Pick up moistened cloth and assume clearing position. Place one hand on front surface and in front middle part of body. This hand will serve as a reference point. Place working hand on front edge of surface, keeping cloth in contact with surface, and proceed to back edge in circular motion. Move working hand over one hand-width; apply more polish to cloth as needed. Continue this procedure until surface has been polished.

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FUSE CHANGING

As soon as one moves into a new dwelling the location of the fuse box and the main electrical switch should be learned. The fuses should be in one box and the main switch should be located near the box. Also learn which fuse controls which section of the house. Braille the information and place it near the box along with a set of extra fuses. That way if a fuse blows the correct one can be replaced rapidly.

There are two types of fuses. The first is a glass fuse and is found in older homes. These fuses come in varying amperage so be sure to buy the correct amperage. It screws in, connecting two wires. When the wires are overburdened, a small wire in the fuse burns up disconnecting the two outside wires leaving a section of the house without power until the fuse is replaced. To replace this type of fuse, turn off the main switch or circuit breaker. Then unscrew the proper fuse. If the circuit breaker is not off when the new fuse is being screwed in it may cause a shock. One may be able to tell which fuse is blown by its warmth but this is not a reliable clue. With the circuit breaker still off screw the new fuse in and then turn the circuit breaker back on. Check the house to find the cause of the overload and remove the problem.

The other type of fuse is a circuit breaker. This type is found in new homes. When the wires become overburdened, this switch will flip out of place. One will be able to tell which section is off because it will be the only handle out of line with the other switches. To restore the power, push the switch all the way in to the off position and then push it all the way back up into line with the other switches.

If the fuse seems difficult to change, one can call the utility service company and a service man should be sent out to replace the fuse.

GLASS AND MIRROR CLEANING

Glass windows and mirrors are irritable items to clean since not only must dirt be removed but also all signs of the cleaning agent must be removed. Since sighted people look through glass and mirrors rather than "at" the surface as when viewing a table top or floor, the glass surface must be spotless. Unfortunately, cleaning agents may leave streaks so that the surface may be sanitized but people will still complain that it is not clean. One can do two things to avoid this complaint. First, move across the surface carefully to be certain that the entire area has been cleaned and no section has been accidentally missed. Second, finish the cleaning with a clean cloth big enough to be turned often so it stays clean, and with a cleaning agent which cuts grease and evaporates rapidly. Many people use vinegar but rubbing alcohol evaporates much more rapidly and therefore is more satisfactory.

To clean glass windows or mirrors, dampen a cloth with glass cleaner and place cloth in right hand. Find an orientation point with left hand. Beginning at orientation point, use small circular motions and move across glass horizontally. Move left hand down one hand length and using it as a guide, repeat motion with right hand. Repeat procedure until entire surface has been cleaned.

GLASS WINDOW WASHING *

Locate window pane dividers as a point of orientation. Place one hand on corner of glass window pane to be washed. Hold liquid cleaner upright in other hand making sure that the point of emission is directed toward the glass, and press plunger briefly several times along top section of pane so liquid can run down. Place cleaner in safe location and pick up cloth in one hand, folding several times. Starting at an orientation point, use small circular motions, moving horizontally. Move other hand down one hand length as a guide and repeat motion.

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IRONING *

To dampen clothes, place articles loosely in a plastic bag approximately the size of a pillow case and preferably with a zipper. Empty one-half cup of warm water in bag. Force out most of the air in bag and zip up or close with a rubber band. Set aside for one hour or longer to allow water to distribute itself evenly through the clothes. If bag is nearly full of clothes, increase amount of water to one cup, close bag, and allow it to stand overnight for a good distribution of moisture.

To set up ironing board, open ironing board according to manufacturer's directions. Place wide end of ironing board convenient to an electrical outlet. Keep cord of iron on same side of board as the person ironing.

To prepare iron, check heat controls, which have been learned by position or with raised line markings. Set controls for garments to be ironed. Locate where cord is attached to iron and the heel rest which is heat resistant. Set iron on heel rest, with cord hanging over near edge of board, under the board, and into the electrical outlet. Flat surface of iron when in upright position faces away from the person.

To iron, choose garment to be ironed and place in position on board. To pick up hot iron, run fingers along front edge of board until cord is located; then follow cord up to iron handle. (When replacing iron on heel, the wrist should touch board first before handle is released to make sure the iron is resting securely on the board.) Iron should be placed about six inches from the broad end of board and in center of board so that if iron tilts over, it does not fall on floor.

The main technique in ironing is to do it in sections. Some method

should be devised to determine where a section ends so that ironer can move to the next section of material to be ironed. If at all possible, seams should be used as guides to determine sections. For instance, material from the shoulder seam to the dart in the front of a blouse is a working section. Where there are no markings such as a seam or a dart to go by, the ironer will have to keep track of where the ironed and unironed materials are connected.

When moving to a new section of material, take the material between the forefinger and thumb at either edge and move material to opposite edge of ironing board. This will put a section of unironed material on the ironing board. Keep only the section you are ironing on the ironing board. If the article has small sections and is difficult to lay flat on the ironing board, it will be necessary to move to the narrow end of ironing board so that you will have only the section you are ironing on the board.

Keep material flat by smoothing out with hand before applying iron. Ironer works on the ironing board from the blunt end of the board to the point of the board in strips. Begin at one edge, and go in strips down the material toward the point of the ironing board, moving iron in small arc-like motions as you proceed down the board. Cover floor under ironing board with unprinted papers or an old clean sheet if article being ironed is long enough to touch the floor.

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LAUNDERING

Collect and sort the wash for laundering. Sighted people sort laundry by color since it is the simplest way. However, laundry can be sorted into four categories by texture and type of wear. Delicate items such as lingerie and frills which feel soft and fine and which are only worn a few times before washing are placed in one category. Clothes which accumulate body dirt ; sheets, towels, and underwear, are usually made of a thicker, sturdy texture and are placed in a second category. Clothes soiled by grease and dirt such as work clothes, sport clothes, and socks are usually made of a tightly woven fabric and feel heavy. The fourth category, non-colorfast items, is the only category which cannot be sorted by texture and type of wear. Ask about the characteristics of a garment when buying it or ask the advice of a sighted friend. Then always remember which items must be kept together in the non-colorfast category when sorting.

> Place container of sorted clothes alongside machine. Using clock positions, begin putting in clothes at 12:00; proceed in clockwise direction around agitator spindle to distribute clothes evenly. Check to make sure that no clothes are on top of agitator spindle. Check floor area around machine for any dropped articles.
>
> Fill machine with water, detergents, and bleach if required, following manufacturer's sequence. Turn on machine. When cycles of washing, rinsing, extracting, and drying are completed, be sure machine is completely off before proceeding to remove clothes. Take clothes out and put in basket or dryer. To check sides and bottom of machine to determine if all clothes are removed from machine, use the following procedure: Put both hands in the machine at the 6:00 position and then move the right hand up along cloth 5, 4, 3, 2, 1, toward 12:00. Then move left hand in the opposite direction - 7, 8, 9, 10, 11, toward 12:00. When both hands meet at the 12:00 position if one has not found any clothes, you can be sure the machine is empty. Run a clean wet cloth all around inside of machine to remove any lint, sand, or other residue. *

To dry clothes, place in dryer. Check floor area to be certain that no clothes dropped. Check door opening to see that no clothes might get caught in the door. Shut door. Set temperature control for regular drying or for the cooler permanent press setting. Turn time control clockwise to number of minutes needed. If control is turned 360° the dryer will run for 60 minutes. If control is turned 180° it will run for 30 minutes; a 90° turn will set the dryer for 15 minutes.

When the dryer stops, open door and test clothes for dryness. Remember that warm clothes tend to feel drier. If dry, remove the clothes and sort and fold them. Check dryer for stray clothes. Place hand inside dryer drum and move it from back to front and then from left to right feeling for clothes. Check floor in front of dryer door for dropped clothes.

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PILOT LIGHT RELIGHTING

A pilot light may go out because lint or dirt has clogged the pilot or because of a sudden draft. If there is a safety pilot the gas flow will automatically be cut off. One can relight this pilot immediately. Push in the button beside the pilot and hold for about 30 seconds while holding a lit match near pilot. It should light.

If there is no safety on the pilot, then wait 5 minutes to let the air clear of any excess gas. Turn pilot on and with lit wooden match, place flame near pilot vent and it will relight. Should feel warmth when it has reignited.

PORTABLE APPLIANCES CLEANING

To clean portable appliances such as a coffee maker, blender, skillet or can opener, disconnect electric cord from appliance if possible. If it is not possible then just wipe outside of appliance, first with soapy cloth and then with clean cloth. Wipe dry.

Remove parts from inside, and wash, dry and reassemble again in appliance. Reassembling of parts makes them more difficult to lose and also the appliance is ready to use again.

If it is possible to unplug cord then disassemble the appliance and wash each part. Do not immerse in water the heating element or plug where cord is attached to appliance. Check for loose knobs, frayed cords and worn dials when cleaning.

POLISHING SHOES *

Shoe polish is available in paste, liquid, and spray form. The spray is difficult to work with. If liquid polish is used a bottle with applicator attached to the top is recommended. Mark each container of polish with Braille so that the correct color can be chosen. Protect the work area with newspaper or a drop cloth.

Put the shoe on the left hand, making sure that laces are tied or tucked inside of shoe. Brush with a stiff brush to clean the shoes of any loose dirt. Check heel and sole edges, particularly around crevices, and clean out dirt. Open polish container according to directions. Apply a thin coat of polish with applicator, first to heel seam, then around the shoe to the toe. Let polish set for a moment, then, to insure even distribution, brush all areas on which polish was applied. Buff the shoe to shine it. Repeat process on other shoe.

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SURFACE CLEANING

Grasp cloth folded to hand size in right hand with fingers comfortably spread apart and extended. Hold the left hand or a container such as a bread pan or a cake pan in left hand just under front edge of table to catch any crumbs or debris. Make sure that the hand or the container is in contact with the under surface of the table. Stand with right side of body next to front edge of table, keeping left hand or container immediately in front of body and in contact with the table. Place hand holding cloth on surface at back edge of table, keeping cloth in contact with surface, and draw hand forward until front edge has been reached, thus pushing crumbs or debris into left hand or container. Move one hand-width over and follow this procedure until entire surface has been cleaned. Put container in safe place or wash off left hand.

Place right hand with cloth on front edge of surface, keeping cloth in contact with surface, and proceed to back edge using a circular motion. Move hand over one hand-width and repeat process. Continue this procedure until surface has been completely cleaned. One will be able to tell if the surface is clean since a clean surface causes less friction on the cloth than a dirty surface.

SWEEPING *

Mentally section off floor space into areas which are bounded by furniture or specific room construction. Pick out a flat wall space of built-in cupboard against which the dirt can be swept to be picked up in dust pan. Grasp broom placing left hand at hip level and right hand near top of handle to provide leverage in sweeping action. Begin sweeping in the section farthest away from this chosen flat space.

Begin at wall space or edge of stationary furniture with broom at an angle to the floor. Pull broom along floor until the handle is horizontal and broom is in front of body. Step backward a half step and again pull broom in a parallel line with the last stroke. Keep broom in contact with floor to the end of the stroke to prevent dirt from scattering. The broom should pass over a portion of floor already swept. These overlapping strokes eliminate missed areas and move collected dirt to next area.

Touch areas of the room or furniture to maintain orientation in the section. For areas under tables, use parallel strokes which are perpendicular to the edge of the table top, reaching under and pulling the broom towards the body. Moveable furniture can be shifted to cleaned areas and can serve as demarcation lines of completed sections.

After one section is swept thoroughly, sweep dirt to next section and repeat process. Sweep final section towards the flat wall space of built-in cupboard which will stop the dirt from scattering. Use short parallel strokes in a semicircle around this space until dirt is in a concentrated pile. Rest the dust pan on the floor at a slight angle at edge of the wall space or edge of the dirt pile. Grasp broom just above straw allowing

handle to rest against inside of elbow. Place broom at opposite side of dirt and pull towards and over the edge of dust pan. Move dust pan back a few inches and using several strokes sweep the semi-circular area in front of dust pan. Repeat several times until no dirt remains, which may be determined by listening to the dirt particles hitting the dust pan. Hold dust pan horizontal until it can be emptied into a waste-basket. Replace dust pan and broom to specific location. With dampened paper towel, wipe the area where dirt was swept into dust pan. Then throw towel away.

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TOILET CLEANING *

Flush toilet and raise seat. Hold a one-half cup measurer over toilet bowl. Fill cup with cleanser until it is completely filled or slightly overflowing. Exercise caution in use of cleanser since some products contain dangerous chemicals such as hydrochloric acid and sodium hydroxide. One may severely damage ones body if manufacturer's instructions are not carefully followed. Pour cleaning product inside bowl. Using a long handled bowl brush start at back of bowl and scrub entire area using a circular motion. Give special attention to the area immediately under the rim and drain.

Flush bowl. Flush a second time with brush in bowl to rinse cleaning product out of brush. Tap brush handle lightly on rim to remove excess water. Store brush.

With a wet sponge wipe off tank and toilet seat and outer surface of bowl. Dry with a cloth or paper towel. If tank "leaks" call plumber to replace rubber plunger or repair lever mechanism.

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VACUUMING *

Divide room into sections, using furniture and walls as reference points. If room is large and there is a great deal of open space in middle of room, a couple of chairs can be used to mark off a boundary line. Attach necessary parts to vacuum, put plug in electric outlet, and turn on switch. Hold metal tube parallel to the body with attachment flat on rug for best suction. Beginning at outer edge of first section of rug, push attachment in a back and forth motion across floor as far as the arms will comfortably reach. Take a half step sideways; repeat motion until a strip the full length of the section has been covered. Step backward a half step; repeat motion working back to point of origin. Continue in this way until section has been covered; then clean the same section, same way, in a crosswise pattern. By taking a half step sideways or backwards each time, the strips being cleaned will overlap.

Continue on to next section, overlapping each area as it is cleaned. Replace furniture as each section is cleaned. Work backward toward the door until each section has been covered. In vacuuming under furniture, the tube is held nearly parallel to the floor. Floor attachment will not get into corners or the edges along the baseboard. Use attachment designed for that purpose.

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WALL SURFACE WASHING *

Remove objects hanging on wall (pictures, ornaments, etc.). Mix cleaning solution according to manufacturer's directions. Arrange step-stool at a starting point with steps alongside wall so the worker can keep one arm against wall for orientation and balance. Place bucket in a location where it is in contact with a central point such as right or left leg of step-stool. Section off areas by means of natural dividers of surfaces to be washed such as corners, windows, doors, picture hangers, and the like.

Keeping one hand on bucket, take sponge in other hand and dip it into solution until it is saturated. When hand holding sponge has reached top edge of bucket, move other hand under sponge so that the two hands are clasped together with sponge between them. Squeeze to remove excess solution, once or several times, until sponge is still damp but not dripping. After mounting stool, keep feet in a squared position in order to maintain a safe position; with torso turned toward wall, locate with one hand a natural dividing line near top of surface to be cleaned.

Using short circular motions with sponge, begin at the natural division line and work out from it horizontally, being careful not to reach excessively and lose balance. Keep other hand on wall for balance and orientation. Move working hand down one hand-width and repeat motion, making sure that each completed horizontal line slightly overlaps the one above. When the section is completed, descend from step-stool, moving it over approximately the width of the body and repeat cleaning procedure. Repeat entire process at low levels excluding

use of step-stool, but positioning feet and torso as for high level cleaning. Use same process to clean horizontal surfaces, after removing all items from surface to be cleaned.

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IV. SEWING

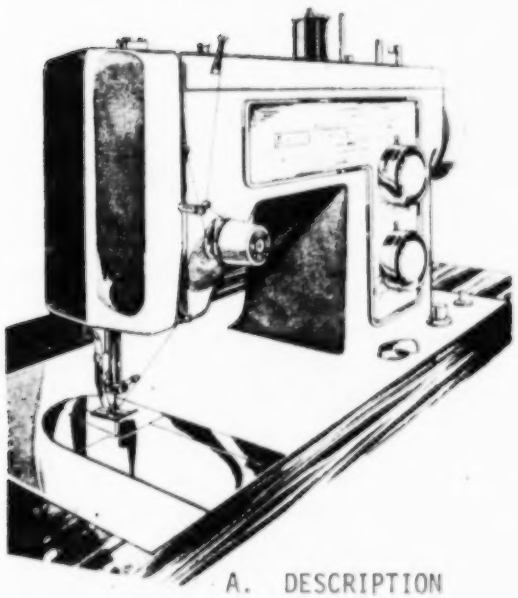
SEWING INTRODUCTION

This section is organized with the appliances used in sewing described first and the techniques used in sewing arranged in alphabetical order.

A list of equipment has been included. The list includes items which are helpful in sewing and can be purchased by one of moderate means. Extravagant items were deleted. One should not need more than is on the list to become an efficient seamstress. Keep in mind that extra equipment requires more storage space and more time to prepare the equipment for actual sewing. Some aids advertised seem useful but upon close inspection take more time to set up than to use. These were not included in this list for that reason. Most of the items included can be purchased at a local fabric store or at a hardware store which is more convenient than sending away for equipment in the mail. However, some of the items listed can be purchased from the American Foundation for the Blind if a shopping area is not convenient.

When teaching some of the following techniques that take many steps to complete, consider teaching using the "reverse task" analysis technique. The end product is shown first so that the preceding steps make more sense and are easier to learn. Some teachers make a display model of all the steps so that the whole procedure can be examined at once.

SEWING MACHINE



A. DESCRIPTION

The sewing machine is a complex appliance housing a motor inside the machine and either a knee or foot control to start and regulate the motor speed. There is a large wheel on the right side of the machine which turns counterclockwise and can be used to hand regulate the speed. The needle is connected to the machine at the bottom left of the machine and moves up and down into the lower part of machine to loop threads from bobbin and make a stitch. The bobbin is below the table surface of the machine.

B. SAFETY

One must be careful to keep out of way of the needle. The needle is thin and sharp and moves up and down in a rather exposed space. The needle is attached to a bar at the bottom left side of the machine. Three-fourths of an inch behind the

needle bar is a bar to which the presser foot is attached. The presser foot is a curved piece of metal which curls under needle and protrudes forward. The needle moves through the presser foot and down into the bobbin case. Never start machine without putting down presser foot first. When presser foot is up it is easy for fingers to move under foot to needle. If presser foot is down it acts as a guard for needle. When sewing, let fingers move up to but never over presser foot end.

C. ADAPTATIONS

One can mark the stitch setting with glue dots. Place a drop of glue at each setting and it should dry raised.

A metal guard can be wound around the needle to further protect ones fingers. This will have to be custom made since currently no company supplies guards.

Put a 1/2" guide tape on the sewing machine perpendicular to the front edge of the machine. Use masking tape, electrical tape or adhesive tape and build it up, layer on layer until each edge is easy to feel under the cloth. Use a carpenter's square (or a sheet of braille paper scotch-taped to the machine will do) as a guide. Put the needle down, bring one side of the square up to the left side of the needle and the other along the front edge of the machine. Lay tape parallel to the right side of the square. Use one strip for the metal head and tuck it under the front edge of the metal; another for the wood so that the head can be put down and the machine closed when not in use. The left side of the tape is the stitching line, the right side of the tape is seam allowance.

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D. MAINTENANCE

Dust machine periodically and brush bobbin case area with small brush to remove lint and stray thread ends. Oil machine following manufacturer's directions.

E. ORIENTATION

Before threading the machine, practice regulating its speed. Locate speed regulator. It may be a knee bar which hangs down from bottom of the machine cabinet to the right of ones right knee. One regulates the speed by pushing the bar to the right. Or, the regulator may be a foot pedal on the floor connected to the machine by a cord. To start machine place right hand on fly wheel and bring it forward toward body. With toes lightly press on speed regulator and machine should start. Practice varying speeds by pressing firmly to go fast and pressing lightly for slower speeds. Practice until it feels as though one is in control of the machine

To thread the sewing machine follow the manufacturer's directions as all machines vary. Most modern machines have loops rather than holes to thread, but to thread the needle, use a needle threader. Find out if the needle is to be threaded from left to right, front to back, or right to left Follow instructions in "needle threading". After needle is threaded, move needle once down and up again holding thread end. This will loop bobbin thread up through feed dog. Move needle once only or knotting will occur. Pass a pin above the feed dog, catch bobbin thread and pull thread up. Next, place thread under presser foot and along with bobbin thread push toward back of machine. There will be less tangling if threads are always kept to back of machine.

Check to see that the control is set for the correct number of stitches per inch. The control is on the right side of the machine near the fly wheel. It may be a dial which when turned clockwise will increase the number of stitches per inch and will decrease the number of stitches per inch when turned counterclockwise. Or, it will be a guage with a handle which when moved upward will increase the number of stitches per inch and will decrease the number of stitches per inch when moved downward.

To start machine, position fabric correctly and place needle down into fabric. Put presser foot down. Gently press speed control and move fly wheel forward toward body if necessary until machine starts.

To keep seam from unraveling at each end, sew over stitching in reverse. The reverse control is at right side of machine near stitch regulator. To use, follow manufacturers directions. When beginning seam, sew forward five stitches then sew back five stitches, and then continue forward to end of seam. Sew bach five stitches and stop machine.

To stop machine, release pressure on speed control and stop needle so that the thread up-take is all the way to the top of the machine. The needle will then be as high as possible and it will be easier to remove fabric from the machine without catching it on the needle point. Also, if needle is not all the way up, after the thread is cut and needle moves up to high position it will become unthreaded.

Put presser foot up and remove fabric by pulling to the left. Pick up the two threads about two inches from fabric and bring them around to back of presser foot bar where thread cutter is attached. Move thread to far right edge of cutter and then hook it inside and over blade on the left side of cutter. Pull down and blade will cut thread.

LIST OF EQUIPMENT - CLOTHING AIDS

1. Surgical scissors - easier to cut fabrics
2. Magnet - keep track of pins easier, use to pick up pin spills, too
3. Sewing machine guard - wire around needle. Must be custom made.
4. Needle threader - to thread needle
5. Tape measure - put staples in each inch and two at each foot for tactual measurement
6. Self-threading needles - hole in top so press thread through. Available from American Foundation for the Blind.
7. Pins with large heads - easier to use tactually, can see colors if partially sighted.
8. Tiny safety pins - for marking darts tactually
9. Masking tape - mark seam allowance guide on sewing machine
10. Colored Mystik tape - mark guide on sewing machine for partially sighted. Use to put in zipper with partially sighted
11. Sewing machine - special version of Viking 1000 for persons with defective vision. From Husqvarna of Sweden, Inc., 405 Lexington Ave., Chrysler Building, New York, N.Y. 10017

BASTING SEAMS

Basting is stitches or pins placed where the seam is to be sewn. The sewing machine may push the top layer of fabric at a slightly different rate than the lower layer*. It is difficult to feel basting stitches so pin basting should be used.

Holding fabric exactly on seam line, place pins at right angles to the seam with heads toward the inside of the fabric.

Pins should be placed no farther apart than three inches along seamline. Make certain that the pin point has gone down through both layers of fabric and come up again through both layers so that it is lying on top of the fabric.**

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BIAS TAPE APPLICATION *

Tapes are used to cover raw edges such as a hem or seam and as a stay to hold some construction lines in place such as the waistline of a dress. Bias tape is made in single fold and double fold. Double fold is just like single fold, except that it has been folded in half.

If directions indicate that half of the tape and no machine stitch should be showing, sew right side of tape onto right side of garment on fold line of tape. Fold tape half way over to wrong side of garment, baste, and sew by hand using a whip stitch.

If directions indicate that half of the tape and one row of machine stitch should be showing, sew right side of tape to wrong side of garment. Fold tape half way over to right side of garment; baste; sew by machine along edge of fold next to garment.

If directions indicate that all the tape and no machine stitch should be showing, sew right side of tape to wrong side of garment. Fold tape all of the way over onto right side; baste; and sew by hand with blind stitch or by machine.

If directions indicate that no tape and no machine stitch should be showing, sew right side of tape to right side of garment. Fold tape all of the way over to the wrong side; baste; sew by hand with blind stitch or by machine.

To attach double fold tape, baste tape onto garment, with wider side of tape on the wrong side. Fit fabric up to center fold of tape. Machine stitch on right side close to the fold next to the garment.

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BOBBIN WINDING AND PLACING IN CASE

To wind bobbin, find the small metal dowel at right side of machine in front of fly wheel and push it upward. Above this dowel is a small rubber wheel. Push wheel as far up as it will move and it will be pressed against the inner part of the fly wheel so that the fly wheel movement will cause this small wheel to move which in turn will move the metal dowel.

Place the spool of thread in the correct position and thread the machine for winding the bobbin, following the manufacturer's instructions. Wind the thread end around bobbin twice and then place bobbin on metal dowel. There will be a tiny metal piece which protrudes from dowel side and will fit into a tiny groove in the side of the bobbin to lock it in place. Turn bobbin and push toward the rig t until bobbin "clicks" onto dowel.

On the right side of the flywheel there is a small inner wheel. Hold fly wheel and sharply turn inner wheel forward toward body. Start machine and the bobbin should wind until it is full and then automatically pop off the lock. Holding fly wheel, turn inner wheel back away from body to tighten into place again. Remove bobbin and cut thread. Push rubber wheel and metal dowel all the way down until they are pressed against the machine again.

To place bobbin in case under the machine working surface, follow instructions of manufacturer. It may be placed so it turns clockwise or counterclockwise but there are little slots in which the thread must catch. Then the thread is pulled in the opposite direction in which the bobbin turns securing the thread in place.

BUTTON ATTACHMENT *

Locate placement of buttons by pinning up garment as it should be if buttons were already on. Take a tiny stitch in the end of the buttonhole nearest the fold (or in the center if buttonhole runs parallel to the fold) being careful not to catch either side of the buttonhole. Unbutton pins and sew button on top of the stitch made by the pin. Be sure any holes in button are placed in same directions as holes in the other buttons. If there is a design on the button, be sure it is right side up and in same direction as other buttons. Leave the pin in until finished and the button will have a little "give". If it is a coat button, put a match between the button and the cloth. When finished, remove the match and wrap thread from the needle around and around under the button and fasten securely.

Use a double thread when sewing on buttons. Take a small stitch on top of stitch made by pin and pull thread up tight. The knot will be hidden by the button. If the button has two holes, bring the needle through one hole from the underside; hold the button between the fingers; cover the hole with the thread in it, find the other hole with the needle (going from top to bottom) and pull thread through but do not slide button down on to the cloth. Lay it down and locate the pin stitch. If the thread is on the left side of the pin, put the needle through the cloth on the right side of the pin and as close as possible to it. Pull thread and button up tight; button will fall into exact position. If the thread has a tendency to twist, slip the index finger of the left hand in the loop between the button and cloth as the button is being pulled into place. Same principal can be used for sewing on shank or four hole buttons.

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BUTTONHOLES *

A piece of half-inch adhesive tape placed horizontally on the machine at the back of the presser foot makes a good guide line for the buttonhole attachment. Turn the knob on the attachment until the frame comes forward as far as it will go and has shifted to the right, ready for stitching on the right hand side of the buttonhole. Be sure the attachment is in this position before placing cloth under it. Place fold of material along the edge of the back guide tape. If buttons are small, use the front edge of tape; if large, use the back edge as a guide line. Smooth out material so fold runs entire length of tape. This will keep the attachment at right angles to the fold. Mark the spots for the buttonholes with straight pins pointed toward the fold and about three inches from the edge. Slide material into position and then to left or right so needle will come down along side of marking pin. Remove the pin; lower presser foot and stitch around buttonhole twice. Stop the machine as soon as the attachment has shifted to the right and is ready to sew forward again. This will keep ends of buttonholes same distance from fold. If cutting blades the size of each buttonhole did not come with the attachment, the buttonhole can be opened with a ripper. Push long point of ripper through buttonhole at one end and push forward gently until cloth is cut to opposite end. If a hand finished buttonhole is desired machine stitch around it once, cut and use the threads as a guide.

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CLIPPING CURVES

Clipping is used either when fabric pulls because there is not enough fabric when it is turned, or when the fabric bulks because there is too much fabric when it is turned.*

Use a seam ripper for clipping curves on seams. Place seam between thumb and index finger with seam allowance above the fingers. Cover machine stitching with thumb nail; poke sharp point of ripper through cloth as close to thumb nail as possible and push ripper away from fingers all the way through the seam. Make as many clipped places along the seam as necessary to make it lie flat and smooth when turned and pressed.**

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CUTTING OUT A PATTERN *

Use surgical scissors for cutting out material. The angle of the blade allows them to lie flat on the table and the knob on the bottom blade can be lined up with the index finger of the left hand at the pattern edge (under the cloth) and held in position during cutting. Since the top blade is short and does not extend over the knob, there is no danger of clipping the finger. These scissors may be purchased in any surgical supply house but they can also be found at notion counters for less money.

After patterns are cut out, use small gold safety pins to mark notches (a small triangle-shaped mark along seam edges that indicates where seams are to be matched) and dots on top layer of cloth. Make a definite stitch (don't just hang the pin over the edge) so that pins not only identify the matching notches but also indicate wrong side of cloth. Turn pattern and material over and mark notches and dots in the same manner on the bottom layer of cloth. If bodice or skirt patterns are to be cut on the fold of the cloth, mark the center front and center back, top and bottom with gold safety pins; it will save much re-measuring later on. Place gold pins on wrong side of scraps so that it will be easy to identify wrong side if facings or bias strips need to be cut out later. Un-pin all patterns and lay aside.

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DARTS *

A dart is a stitched fold, tapered at one or both ends, made in a garment for fitting fabric to curved areas of the body.

Fold dart down the center on the wrong side with fold in the right hand and the pin at point of dart exactly on the fold. Match safety pins so that those on the cut edge lay one on top of the other with the loose part away from the fold. Put in a straight pin parallel to the safety pins and as close as possible. Point the pin toward the raw edge so that the head will be easy to grasp for removal. Place another straight pin at right angles to the fold at the point of the dart. Remove safety pins. The pin parallel with the fold will be the guide pin for beginning of dart. Place the guide pin under the presser foot until the raw edge of the seam touches the finger at the back of the presser foot and the pin is between the prongs of presser foot and on top of left margin of guide tape. Lower the needle; check to see if the needle is touching the guide pin. When it is, pivot the cloth so that the pin head on the point of the dart also touches the left edge of the guide tape. Remove guide pin, lower presser foot, flip reverse lever and back stitch for about three or four stitches to fasten thread, put lever in forward position, hold pin at point of dart against the left margin of guide tape and sew until machine stitches off of the material. Leave about 1/4" tail on the threads to prevent raveling or threads may be tied if you prefer.

Princess darts do not have a waistline seam but begin at a point, stitch to the widest part of the dart (waistline), and return to a point. All basting pins should be placed at right angles to the fold. Put the needle down on the fold at the top guide pin, remove pin and pivot cloth so that the pin head at the waistline lies next to the left side of the guide tape. Stitch, holding this pin head so that it follows along the

guide tape. When this pin comes up to the presser foot, take one stitch at a time (control by using right hand on fly wheel and left finger on set screw above the needle) until the needle comes down through the cloth and touches pin head; raise presser foot, remove the pin, pivot cloth so that the bottom pin lies just to the left of the guide tape and continue as for a simple dart Steam press all darts over a tailor's mitt, if you have one, with the point of the dart over the rounded end of the mitt so that your darts will have a contoured look Press waist and skirt darts toward the center, under-arm darts down Do not clip center of princess dart to make it lie flat until after dress has been fitted and it is determined whether or not the darts are correct size and in the right position.

If dress bodice is to be interlined with other material, pin the two pieces together, stitch down the center line of the darts (this stitching line will not show when dart is made) and treat both pieces as though they were one.

Match seam notches according to pattern directions. Pin baste with straight pins placed at right angles to seam. (Basting threads are too difficult for the blind girl to find after machine stitching is completed.) Remove safety pins and stitch If machine has a hinged presser foot, it is not necessary to remove straight pins before stitching. Be sure to back stitch all seams at beginning and end Steam press all seams.

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EDGE STITCHING *

To edge stitch pockets, hems or facings, place material under presser foot so that the turned under edge extends just beyond the left margin of the guide tape and under the left prong of the presser foot If the stitching line is on the straight of fabric, it is helpful if the material is placed so that the entire length of fold just covers the guide tape This is impossible if the line is curved (neck facings, etc) and control must be maintained by keeping the fold under the left prong of the presser foot. If top stitching is being done on facing or pocket that comes to a point, it is difficult to determine how far to sew before changing directions so that the stitches will be as close to the edge of the second line as the first Use a straight pin as a guide; begin at the point and bisect the angle at the point To determine the correct place to turn the corner, sew up to the pin, put the needle down, raise the presser foot and if the needle is touching the pin, pivot the cloth so that the next edge to be sewed will lay along the left margin of the guide tape. If the needle does not quite touch the pin, walk it up a stitch at a time (turn the fly wheel by hand) until it does Continue on until the item is finished.

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FACING *

A facing is a piece of fabric cut on the same grain as the garment which is used to finish edges such as necklines and armholes. Stitch facing shoulder seams together and press seams open. Fold unnotched edge in 1/4 inch and press. Fold once again 1/4 inch and press. Stitch along fold so unnotched edge has finished edge. Pin and stitch right side of facing to right side of garment matching notches and seams. Trim following directions for "Trimming Excess Material."

Understitch the facing. Understitching is a technique used to hold facings or seams in place so they will not come out or show when the garment is worn. To understitch, press seam toward facing. With right side up machine stitch facing to seam allowance about 1/8 inch from seam line. No stitching will show on outside of garment.

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FITTING A GARMENT *

A dress form is a most useful item to the one who sews for herself. There are adjustable ones on the market but none are as satisfactory as the one made over the individual figure of surgical stockingette and 1" gummed tape. If it is put on a stand the same height as the girl, she can then mark her own hem lines If this kind of dress form is too expensive and if the individual is an "average" size, try out a few patterns in your size from different manufacturers on inexpensive materials until you find one that is the best fit, then stay with this brand of pattern. If slight adjustments are needed to make the pattern fit, make the same adjustments on the heavy paper pattern before putting it away. Dresses made from the same pattern will not look alike if made of different materials -- some print, some plain -- one with a collar, one without.

If darts are to fit properly, check the line of dart and if an extension of this line would cross the bust point, the dart is in the right position. If not re-pin the dart so that it does. For a nice rounded look, bring the dart to a point an inch or inch and a half short of the bust point. Back bodice darts should, if extended, come to a point at the shoulder blade.

After all darts are made sew in shoulder seams and pin up side seams; use small gold safety pins for first fitting. If adjustments are needed on side seams be sure to take out same amount on both right and left side or the garment will not hang properly. Make any waist line adjustment needed and sew bodice to skirt before installing the zipper. Be sure to check and make sure that waist line seams, front and back, match when zipper is closed.

Steam press all seams before fitting. An ordinary polyethelene kitchen baster is excellent for filling the steam iron. Keep the water in a quart fruit juice or wine bottle whose neck is long enough to prevent the point of the baster from reaching the bottom. Any sediment will settle to the bottom and when the baster no longer touches the water level, it is time to rinse the sediment out of the bottle and fill it with fresh water.

FRENCH SEAM **

French seam is a small seam which protrudes from the garment on the wrong side and has no raw edges. Pin wrong sides of fabric together. Machine stitch with regular stitch at 1/4 inch. Press seam flat. Fold on seam line with right sides together sharply. Machine stitch 3/8 inch from pressed seam line.

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GATHERING MATERIAL AND ATTACHING WAISTBAND *

Gathering is two rows of stitching either hand or machine, one on each side of the stitching line that are drawn up to form fullness.

Use button hole thread on the bobbin when sewing in gathering threads. Stitch on the right side of the cloth, using the right edge of the guide tape as seam allowance. For gathered skirts, put in two rows of stitching 1/4" apart and when the threads are pulled up together, the gathers will lie down much smoother on the band and be easier to pin in place. Back stitch at the halfway mark (usually the opposite side seam). For the second row, move the material to the left so that the first row of stitching will lie to the left of the long prong of the presser foot. Use this stitching as the guide line. Leave at least a 12" tail on the thread at the beginning and end for ease in handling. Divide both band and skirt in fourths. Disregard seam allowance and overlap on the band. Mark with gold pins hung over the edge of the cloth; they will be easy to find for matching and will not interfere with any stitching line. Stitch across both ends of the band on the wrong side. Turn and poke out corners so the seam will press down smooth. If there is too much material in each corner, trim off. Grasp both bobbin threads and move gathers along to the half way point. Repeat for the opposite side. Match band and skirt pins, right side to right side and pin baste. Loosen threads or tighten to make gathers fit each space. Put basting pins at right angles to the seam and no more than an inch apart. Make sure that tab extension of the band is pinned to front side of skirt. Place gathering thread nearest edge of cloth between the prongs of the presser foot and along the left side of the guide tape. Turn band and pin baste raw edge just below the top gathering thread. Steam press. Top stitch band on right side,

holding fold of band along left margin of guide tape. The second gathering thread should be on the left of the long prong. Check underneath side of the band and if the top stitch missed any of the lap over on the underneath side, blind stitch it down.

HAND HEMMING STITCH OR TAILOR'S STITCH **

This is a stitch which can be made in varying lengths depending upon the construction detail which is hidden by the fabric and is inconspicuous on either side of the garment. In sewing two pieces of fabric together, one piece of fabric is held folded at the stitching line and away from the other piece of fabric. Using a single thread, a small stitch is taken in the straight piece of fabric; moving forward (from right to left) a small stitch is taken in the fold of the fabric; then going forward another stitch is taken in the straight piece, and so on. The distance between stitches is small when used in hemming but 2 inches to 4 inches apart in tailoring. This stitch is used particularly in tailoring and with thick fabrics because it is secure and yet loose.

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HEM MARKING *

A regular skirt marker on a stand can be bought at any department store, but an 18" ruler works better. Put a piece of adhesive or masking tape on the ruler at the proper place for the hem and another piece of tape below this line to represent the width of the hem. Mark both lines at the same time, the hem line with gold safety pins, the hem width line with straight pins; turn up cloth so that straight pins will be on the fold, press; slip point of straight scissors in fold (surgical scissors will not do) and trim off excess. Sew on tape, then turn up hem so that gold pins are on the fold. Pin baste hem in place.

Another way to mark a hem is to mark the hemline with a skirt marker or ruler using gold safety pins. Then, take off skirt and fold hem up where it has been marked. Baste near folded edge by placing pins close together. At that point determine width hem should be. Measure hem width chosen with hem gauge placed at folded line. Mark with pins placed parallel to folded line. Try to stitch them through only one layer of cloth. Carefully cut along row of pins. Turn down newly cut raw edge and sew tape on edge. Hem garment.

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KICK PLEATS *

Sew in kick pleats and steam press in place before side seams are stitched up to eliminate handling of much bulky material. Place a row of guide pins along the stitching line about six inches apart in either a vertical or horizontal position. Measure width of pleat from fold to each pin head. Lay the pin heads along the left margin of the guide tape and hold them in place with index fingers of both hands. Sew until the fingers touch the presser foot, remove the pin, line up the next pin with the guide tape and continue in this manner until the last pin is reached. Back stitch no more than two or three stitches or the pleat may not iron down smooth; come forward same distance and clip threads close to cloth.

KNOTTING THREAD

Hold thread between thumb and third finger of left hand. With right hand wind thread around forefinger in counterclockwise direction. When lightly wrapped around finger twice, place thumb below thread and rub up to fingertip. This motion should roll thread upward twisting the two strands together. Pick up thread trail in right hand as thumb rolls thread off finger, place twist between forefinger and thumb nails and pull down causing a knot to form.

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NEEDLE THREADING

A third hand is needed for this so stick needle straight down into a piece of styrofoam or into a cardboard box lid. Take a needle threader and notice the thin wire loop attached to its handle. Feel the eye of the needle. Gently place the crease of the needle threader against the needle eye. Press gently and wire should fold and go through eye. When it has passed through it should widen again. Place end of thread through wire loop. Gently draw loop back through needle eye and needle will be threaded.

One may use a self-threading needle instead of the regular needle and a needle threader. The self-threading needle has a very narrow slot beginning at the top of the needle and extending into the eye instead of having a hole which one pierces with the thread. Place the needle straight down into a piece of styrofoam or a piece of cardboard as a third hand. Place the thread in both hands and holding it taut place it on the needle top. Push down and the thread should slip into the slot and on down into the eye. The disadvantage of the self-threading needle is that the slot weakens the needle top and so the needle breaks more easily while one is sewing.

PATTERN LAYOUT *

Fold material lengthwise with the wrong side out. The center crease on cottons and most other materials, except 54" woolens, will be on the right side.

Place larger pieces of pattern on cloth. Lay grain line so it will be parallel to the selvage. Measure bottom point of grain line to selvage and pin, using a very small stitch. Measure same distance from selvage to top point of grain line; shift pattern if necessary; pin. Smooth out pattern on cloth and pin all points and curves securely. Push pin points through the cloth to under side to prevent snagged fingers when cutting out material. Place smaller pattern pieces on cloth paying strict attention to grain line, if any, and directions for placing on fold. Pin securely.

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PATTERN PREPARATION

Use heavy wrapping paper (hardware store is a good source) for patterns. Ask a sighted person to pin on tissue paper pattern and make an exact replica along cut out line. Cut out all notches (inward not outward) and holes for the marking dots (location of dart points, buttons, pockets, etc.). If an underarm seam matching notch is close to the notches for a dart, move it farther away, up or down, depending on the kind of dart so that this notch will not be confused with the notches for the dart when it is being stitched up.

Mark all grain lines and outline of darts on each pattern piece. Stitch along these lines with machine, leaving thread in and stitch as long as possible. This makes location of darts and direction of grain line easy to find on the pattern when ready for lay-out.

Identify each piece of pattern by pasting on Brailled labels, giving name of pattern piece, pattern number and size. Braille directions (center front, place on fold, etc.) and paste on each pattern piece where applicable. Braille directions for assembly, simplifying steps as much as possible.

Cut a small triangular hole near top of each pattern and run a tape through all pieces and hang from hanger or hooks in the back of the closet. If closet space is at a premium, roll all pattern pieces together, right side of pattern on the outside (they will lay down much smoother when unrolled), tie and store in a drawer.

If pleat lines are indicated on a skirt pattern, stitch these lines on the sewing machine -- one short line, one long line -- and Braille the directions, "fold at short line and bring to long line"; paste on skirt pattern.

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POCKET *

If pockets are cut on crosswise of material, lay the top of the pattern along the selvage and the hem will not need to be stitched down to the pocket. Cut a cardboard pocket form that will be the exact size of the finished pocket. To press in the pocket hem, place cardboard form under the hem and center it on the cloth; fold over seam allowance and steam press. Remove the form, fold side edges over all the way to the top and then hem down so no raw edges will show and steam press on right side. Pocket is ready to be pinned into place. Before steam pressing, anchor small turned under edges in place with straight pins pushed into ironing board cover and pad. Eliminates steamed fingers.

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RIPPING

Ripping means to take out stitching. The best tool to use is a seam ripper which is shaped as a flat curve coming to a point at each end. The curved portion in the center is the knife.

With seam ripper in right hand place heel of right hand down on right side of seam. Press firmly. With left hand hold left side of seam taut. Angle point of ripper toward seam stitches. Guide point of ripper with left forefinger.

To rip, catch the point of the ripper under the uppermost stitch of the seam and moving upward and away from the fabric, let the stitch slip down to the ripper cutting edge to cut the stitch. Hold the seam apart and catch each stitch with the ripper point and cut away from the fabric.

SLIP OR BLIND STITCH *

This is a stitch which is inconspicuous on both sides of a garment. It is a sturdy stitch because most of the thread is covered and therefore, does not wear out and break. Using a single thread, a small stitch is taken into the garment and the fold. The needle is then slipped through the fold so the thread is covered by the fold. Then another small stitch is taken holding the two pieces of the fabric together; then the thread is slipped through the fold again, and so on.

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SNAP, HOOK AND EYE ATTACHMENT

Mark location of snaps with straight pins as for buttons. Most snaps have a hole in the center through which to put a pin to hold the snap in place while it is being sewed on. Find this hole with the point of the pin, then spot where it is to be placed and push pin through cloth. Remove marking pin; hold anchor pin between fingers of left hand until two holes of the snap have been sewed on using a close slip stitch, then it also can be removed. This will prevent snap from slipping to one side and out of line. Keep track of the other half of snap by pinning it to material with a small safety pin through one hole. *

Mark location of hook and eye with straight pin as for buttons. Holding piece over marking pin, fasten to material with close whip stitch around base through holes of hook or eye. Take stitches across hook under end of hook to keep hook flat against garment. **

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STRAIGHT SEAM STITCHING *

Before beginning each seam, push material under the presser foot until it touches the index finger of the right hand placed at the back of the presser foot. Slide material to right edge of guide tape for seam allowance. Lower presser foot and back stitch three or four stitches and then come forward. This not only fastens the thread securely so that thread ends can be cut off close to material but also prevents many tangled threads caused by sewing when there is no cloth under the needle.

Use presser foot and index and middle fingers of the right hand as guides for seam allowance. If the index finger touches long prong of the presser foot and middle finger touches index finger, the outside edge of the seam should be under the middle finger. (Keep the middle finger stationary; it will have a tendency to follow the edge of the cloth when the seam begins to get too wide.) As the material moves forward, the fingers of the left hand rest lightly on the cloth and move it to left or right to keep the material flowing evenly under the middle finger of the right hand. If the seam is a straight line, the thumb of the left hand can help keep the seam edge on the right margin of the tape which keeps the material moving in a straight line, but if the seam is a curved one, this is impossible and control of seam width must be done by right hand.

Always keep finger tips flat on throat plate of machine; even though fingers follow material along (which they must do when seam is almost completed) they will not get caught by the needle since the prongs of the presser foot identify needle location and act as a good reference point. No special guards are needed.

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TRIMMING EXCESS MATERIAL *

Trimming is a method of reducing bulk when there is too much fabric after the detail has been turned.

When trimming off excess material, fold edge over scissors where it needs to be trimmed and cut off. If the excess material is in a collar point or other corner, hold material between thumb and index finger of left hand with nail of thumb covering the thread at the point. Use end of thumb as guide for the scissors.

WHIP STITCH **

To make a whip stitch use a single thread in needle. Take small overhand stitches about 1/2 inch apart from each other. A whip stitch is used when strength is wanted.

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ZIPPER *

Sew in zipper before garment is assembled. A minimum amount of material is involved, it will lie flat on the machine and be easier to handle.

Match seam in which zipper is to be sewn -- right side to right side -- and pin baste at top and bottom. Lay the zipper on top of the seam and put basting pin in the seam at the bottom of the zipper teeth (not at the end of the tape). The pin should be at a right-angle to the cut edge. Check the top of the zipper to make sure that the end of the tape does not extend above the material. Lay the zipper aside. Pin-baste seam the rest of the way to the bottom with all pins at right-angles to the cut edge. Beginning at the first pin, place material under the needle; allow slightly more than the regular 5/8" seam allowance. Instead of raw edge of the material being even with the edge of the guide tape on the right side, bring it a little more to the right so that the edge of the material comes over the tape and touches the metal bed of the machine. When the seam is stitched, pressed open and the zipper placed on top of the seam, the raw edges should extend beyond the edge of the zipper tape. Put the needle down and check position of the first basting pin. If it is not touching the needle, adjust it so it does. Line up seam with the guide tape in front of the needle. Make the raw edge touch metal. Put the presser foot down, stitch forward two or three stitches, backward the same number of stitches, then forward to the end of the seam. It is important to back stitch just to the guide pin and not beyond it or part of the seam where the zipper is to be will be closed. Sometimes it is helpful to turn the fly-wheel by hand for these first few stitches (index finger of the left hand on the needle bar to count stitches as the needle

goes down) instead of using the motor for power. When seam is finished, remove all basting pins except the first one that marks the location of the end of the zipper teeth.

Machine-baste top part of seam where zipper is to be installed. First, pin-baste seam (pins at right-angles to cut edge.) Loosen tension slightly and adjust stitch to its maximum length. This should make the seam easy to rip out after the zipper has been stitched. If one has buttonhole or carpet thread available, put it on the bobbin, then the thread can be pulled out instead of ripped. It is very important to keep basted seam in line with the stitched-in seam or there will be a pucker in the material where the seam and zipper meet. Place material under the needle with pin-basted part of seam in front of needle and part of stitched-in seam laying against the left side of the guide tape. Push the material forward until the first pin is up to the needle. It is helpful if one holds the tail thread of the stitched seam in one hand and makes sure that it goes between the prongs of the presser foot as the material slides into place. Put the needle down and check its position. It must be touching the marking pin; if it isn't, raise the needle and re-adjust it so that it does. Machine baste to end of seam. Do not back-stitch either end. Leave a long tail of thread on this seam (long enough to wrap around fingers several times.) Clip threads, separate them and cut top thread off close to the material. This will be the thread from the needle, leaving the bobbin thread with the long tail. Clip thread ends on both sides close to the cloth where the stitch-in seam and the basted-in seam meet at the first cross pin. Remove all pins, press seam open. If there is a pucker where the two seams meet, pull out long thread at the end of the basted seam and re-do it. Press seam open again and check.

Lay material on the table, wrong side up, end of basted seam to the right, bottom of basted seam to the left. Place zipper, right side down, on top of this seam; the teeth should be on top of the thread line. Line up end of tape that extends beyond the zipper -pull with the cut edge of material. This extra amount of tape above the zipper teeth is allowed so that it can be stitched into the facing seam without the needle striking the teeth of the zipper. Pin tape ends to top of seam. Smooth zipper along seam line; pin tape ends to material at end of teeth. Re-check to make sure there are no wrinkles. Pin-baste tape above zipper teeth to the cloth all the way from top to bottom. This time, pins should be placed along outer edge of tape and parallel to it and the zipper teeth. Start the next pin at the point of the first, pin through the zipper tape, seam allowance, and the material under it. Leave no space between pins. Zipper teeth must lay on top of seam, not to one side or the other. Some students find it easier to identify position of teeth and keep them on top of basted-in seam if the zipper is open, bringing points of teeth to seam line; some lift up lower flap of seam, stand it straight up between thumb and index finger, bring teeth points up to material, hold in place and pin tape down. Others leave zipper closed, crumple up material above the seam in the hand so that thumb is on top of zipper teeth and index finger is under material on seam line. When teeth are on top of thread line, pin in place. Pin-baste one side only; put no pins except the cross pins at top and base of zipper teeth on the side below teeth.

Turn material over, run finger along seam line. If zipper teeth can be felt laying on either side of seam, take out nearest pin, re-adjust position of teeth and re-pin. The zipper teeth must cover the seam line or the flaps that cover the teeth will not be the same width when basting

thread has been removed and seam is open.

To stitch zipper in place, put material on the machine, right side down, zipper on top, teeth and basting pins to the left of the presser foot. Use the regular foot, not the zipper foot. The pins will hold zipper firmly in place but in no way interfere with the needle which should be on the right hand edge of the zipper tape. Back-stitch tape extension at beginning of zipper. With finger of left hand holding zipper pull against presser foot, stitch slowly until pull moves past the presser foot. Stitch to cross pin at base of zipper teeth keeping the teeth pressed against left side of foot. As soon as cross pin is behind needle and a little of tape ends are still in front of presser foot, put the needle down, remove pin, turn material, stitch across tape ends, back stitch to edge of tape but not beyond it, come forward to edge of tape making three rows of stitching at the base of the zipper teeth. Put the needle down, turn material so that zipper teeth are again laying on left side of presser foot, remove basting-pins and stitch on top of zipper. Fasten thread at end with two or three back stitches; clip threads close to material being careful not to clip off the long tail of the basting thread.

Lay material right side up on table. Run index finger down seam line to make sure that in no place do the teeth of the zipper lay on one side or the other side of the seam line. If they do, rip out zipper and try again. Check edges of zipper tape also to see that they are stitched to the garment. If there are any gaps, do not try to repair them by stitching that portion again; rip out all the stitching on that side and re-stitch all the way from top to bottom. Since the zipper is held firmly in place by the stitching on the opposite side, no pins are needed except the one at the base of the zipper teeth.

To rip out seam under zipper teeth, find the long tail of thread extending beyond zipper pull; wrap it around the fingers several times and pull. It should slide out easily leaving zipper teeth exposed on right side. Try the zipper to see if it opens and closes easily; check flaps covering teeth for uniformity. If one flap is very narrow and the one on the opposite side is very wide, the zipper should be ripped out and re-done if one wants a neat looking product.

Installation of the hidden zipper, although not impossible for some blind girls, should not be attempted by the beginner. It presents more difficult problems than the above type of zipper due to the special foot needed which has no prongs, only the two narrow grooves underneath which guide the teeth of the zipper.

Partially sighted students may use masking tape or Mystik tape to help them put in a zipper. Sew the seam allowance shut as described above and place the zipper in correct position as described. Tape zipper in correct position instead of pinning, by taping across zipper back in enough places so zipper is held securely. Check to make sure that zipper teeth are properly alined with seam. With material right side up, run 5/8" wide strip of tape down length of zipper, beginning at top and stopping at bottom of zipper teeth. Make sure that tape is straight and centered by feeling seam and teeth through tape. When positioned correctly sew all around tape edge. Remove tape and open seam. Zipper should be in correctly.

* This section is reprinted from Sewing Techniques for the Blind Girl with the permission of the author, Sally Jones, with the exception of the final paragraph which is written by Constance Rahn.

APPENDIX

SOURCES

There are several sources for publications converted into Braille, large print type and talking books. Write to the following places for catalogues when searching for a cookbook or textbook which is needed in a non-visual version:

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, Kentucky 40206

Division for the Blind & Physically Handicapped
The Library of Congress
Washington, D.C. 20542

Howe Press of Perkins School for the Blind
175 North Beacon Street
Watertown, Mass. 02172

For tape, contact the State Library of the state in which the student resides. In California contact:

Books for the Blind and Physically
Handicapped Section
The California State Library
Post Office Box 2037
Sacramento, Ca. 95809

There are several publications dealing specifically with home economics for visually handicapped persons. The author has included a list of those she has actually used and which relate specifically to blindness. The other publications are not listed since they were not reviewed. The American Printing House has a more complete listing. Look under the specific area of interest in the catalogue.

A STEP-BY-STEP GUIDE TO PERSONAL MANAGEMENT FOR BLIND PERSONS. (print, Braille) American Foundation for the Blind, 15 West Sixteenth Street, New York, New York 10011.

CAMPBELL COOKBOOK. Campbell Soup Company, (large print), Camden, New Jersey 08101. Volunteers Service for the Blind, 332 South 13th Street, Philadelphia, Pennsylvania 19107.

COOKING COURSE FOR THE SIGHTLESS. (print) Home Economics Department, Pacific Gas and Electric Company, Room 2737, 77 Beale Street, San Francisco., Ca. 94106. (They will send one complimentary copy and allow you to reproduce copies)

HINTS FOR BLIND HOUSEWIVES (print) The Royal Institute for the Blind, 224-6-8 Great Portland Street, London W. IN 6 AA, England.

HOMEMAKING MANUAL: A reference Manual for Home Teachers Working with the Adult Blind. (print) Western Michigan University, School of Graduate Studies, Kalamazoo, Michigan 49001.

KITCHEN TRADE SECRETS (Braille) Sally Jones, Volunteers Service for the Blind, 332 South 13th Street, Philadelphia, Pennsylvania 19107.

PRE-PRIMER COOKING OR COOKING TECHNIQUES FOR THE BLIND. (print) Orientation Center for the Blind, 400 Adams Street, Albany, Ca. 94706

RESOURCES IN HOME ECONOMICS FOR THE BLIND HOMEMAKER, Dale, Verda M. and Susan Uhlinger, Massachusetts Home Economics Association, University of Massachusetts, Amherst, Massachusetts, 1969

SEWING TECHNIQUES FOR THE BLIND GIRL (Braille) Sally Jones, Volunteers Service for the Blind, Inc 332 South 13th Street, Philadelphia, Pennsylvania 19107.

SEWING TECHNIQUES FOR THE BLIND GIRL (print) Orientation Center for the Blind, 400 Adams Street, Albany, California 94706.

TECHNIQUES FOR EATING: A Guide for Blind Persons. (print) Western Michigan University, School of Graduate Studies, Kalamazoo, Michigan 49001.

The best place to find classroom aids is the local hardware store and the local sewing shop. Many low priced convenience gadgets can be used without adaptation in the classroom. Another source for aids are mail order houses such as Spencer Gifts in Atlantic City, New Jersey.

Specific sources of aids for visually handicapped students are:

American Foundation for the Blind, Inc.
15 West 16th Street, New York, New York 10011

American Printing House for the Blind
1839 Frankfort Avenue, Louisville, Kentucky 40206

Science for the Blind
221 Rock Hill Road, Bala-Cynwyd, Pennsylvania 19004

Royal National Institute for the Blind
224-6-8 Great Portland Street, London, W IN 6 AA, England

ORIENTATION AND MOBILITY

The following terms are used by mobility specialists and define techniques which should be understood by visually handicapped children and special teachers. *

Orientation: the establishment of awareness of one's position in relation to the environment and significant objects within the environment by utilizing the remaining senses (including sight).

Mobility: The ability to move safely, effectively and comfortably from one place to another within the environment by utilizing the remaining senses (including sight).

Clue: Any sound, odor, temperature, or stimulus which can be used by the visually handicapped child to help him determine his position or direction, e.g., recognizing the location of the nurses' office from the odor of alcohol and disinfectant.

Shore Line: Any continuous line which acts as a guideline along an extended line of travel, e.g., the edge of a sidewalk or a grassline.

Direction Taking: The process of using an object or sound to establish a course of direction toward or away from an object.

Landmark: A familiar object or clue which has an exact and known location in the environment.

Squaring Off: The process of positioning one's body in relation to an object in order to establish a new line of direction.

Run: The mapped out course or route to be traveled to a given objective, e.g., when you leave the room, turn right and go to the 5th door on the right side of the hall.

Trailing: The process of using the back of the fingers to follow a surface while maintaining a line of travel parallel to that surface.

Following Techniques: The blind person's proper grasp just about the elbow of the sighted guide and the subsequent walk.

ORIENTATION TO CLASSROOM * *

Use the technique described in the preceding pages. Begin at the classroom entry way. If there is more than one entrance, show the student where each one is located. Give general information about the room and how it is arranged.

Begin the run at the door. Use one wall or large piece of immobile furniture as the landmark from which to take all directions. The run should take no shortcuts to the goal but should be one where the student can trail all of the way. Make the first runs simple utilizing the methods of squaring off, straight lines, and right angle turns to insure success. Use left and right commands. Once the student has learned the run he may choose to use shortcuts.

Emphasize the need to develop awareness of the environment by seeking from the student information about 1) the clues in his environment, 2) the type of clues, and 3) the source or origin of clues. Explain what the student will find if he moves short or long of the goal. Examine the windows to see if it is possible to jump out of the first story window in case of fire.

When teaching the run be sure the student learns it in one direction completely before teaching the return run since the return run will not feel like the first route backwards but will be a completely new run. The student should be able to explain what is to his left and to his right while facing an object and then what is to his left and to his right when his back is to the object. The end result should be a student who moves easily and carefully around the room with his movements in control.

ORIENTATION TO LABORATORY

Use the techniques and terms described in the preceding pages.

Explain which furniture is mobile and so cannot always be relied upon to be in the same position. Show the student the large appliances and examine them as described under their various headings in other pages. (Refer to Food Section pages 3 through 20 for example). Show him the water faucets and examine the way in which they turn on and off.

Show the student where every drawer is located and what it contains. Be sure to bend at the knees, not stoop, when moving to look at items on the bottom shelves. That way, ones head will not accidentally hit the counter. Leave one hand placed on the counter for orientation. Make sure all doors and drawers are kept closed when not in use so the student will not hit them.

The student should be able to travel the run with his hands full. Practice until he can do it, letting him use his feet and hips as "protruders" while carrying items in his hands.

GROCERY STORE ORIENTATION

This description is an example of the way one can examine an unfamiliar area during a field trip using nonvisual perceptions. The ideas discussed are intended to be thought provoking rather than a list of rules since all grocery stores differ and since it is only one example of a field trip. A trip to a department store or a cannery would use the same type of clues but in different ways.

One should never assume anything when taking students on a field trip. Therefore, explain everything. Make it clear that different stores are arranged differently. Even within the same store the displays may be switched periodically so that the consumer will become disoriented and discover new food products while searching for a particular item.

Usually the sale items for the week are placed at the ends of the aisles. There seems to be no way that a visually handicapped student can shop for groceries without the aide of a sighted guide.

It may be helpful to construct a tactual map before the field trip which shows the layout of the store. It should be very simple and can be made of string pasted on cardboard. It should show the main aisles of the store to scale. It can be referred to when moving from one section to another so that the relationships can be seen.

While approaching the supermarket, explain the number of entry doors there are and how they open automatically. Show the student where the various doors are located. Enter one of the doors and show the student the turnstile and how it turns in a circle. Show the student where the grocery carts are. They are usually placed at the far left or far right end of the check out stands. Show how they are stacked together. The student is less likely to run into objects if he pulls the cart in back of him instead of pushing the cart in front of him.

In the meat section, ask if the student can go behind the counter and examine a full side of meat. He may place baggies over his hands to keep the meat and his hands clean while feeling the meat. If possible, show the cuts of meat before they are packaged as it is difficult to feel the meat after it has been wrapped in trays.

In the bakery section, examine the different shapes of bread by squeezing them gently through the wrapper. The different kinds of bread may be smelled through the wrappers.

Show the student the different sizes and shapes of cans. When he is shopping for canned goods he can mark the cans by tearing one label and putting a rubber band around another until he reaches home and can

label them with a dymo tape or other Braille label. Some students mark the cans at home with a 3 x 5 Brailled card attached to the can with a rubber band. These cards can be brought to the store and attached to the can as soon as it is removed from the shelf.

Show the student where the frozen products section is located. Feel the cold air rushing out. Examine the different products in bags and boxes. Compare the different ice cream containers.

Show the student the cases that contain the dairy products. Examine the different shapes of cheese, noting that some are soft and some sliced. Explain that there are several types of milk in the same kind of containers.

Show the student where the spices are located, smelling some of them for identification. Also show him where the detergent aisle is and how one can find it by its aroma.

Show the student the fresh produce section. Examine the products for example, by smelling the berries and melons, gently feeling the lettuce and tomatoes and by examining the texture of the potato and pineapple skins.

Show the student the check out stands. See if the cashier will allow the student to examine the cash register and the storage area for paper bags. Let him see how the food is bagged. Explain how to move out of the store.

* This first section of definitions is reprinted from Handbook for Teachers of the Visually Handicapped, Napier, Grace and Mel Weishahn, American Printing House for the Blind, Louisville, Kentucky, 1970.

** The information in the second, third and fourth sections was given by Mr. Burdel Wurzburger, Associate Professor of Special Education, Orientation and Mobility, San Francisco State College, San Francisco, Ca.

CONSUMER PUBLICATIONS

The information contained in this section may be of assistance in initial efforts to better utilize the existing and more widely known journals and publications. The following list of periodicals is not inclusive but the most complete that could be compiled.

* Changing Times, Kiplinger Washington Editors, Inc. 1729 H St. N.W., Washington, D.C., 20006. Monthly.

Consumer Alert, Federal Trade Commission. Monthly, free.

* Consumer Bulletin, Consumers Research, Inc., Washington, New Jersey 07882 Annual.

Consumers Digest, 6316 N. Lincoln Avenue, Chicago, Ill. 60645. Bi-monthly.

Consumer News, Office of Consumer Affairs, Government Printing Office.

Consumer Reports, Consumers Union of U. S., Inc., 256 Washington St., Mount Vernon, New York, 10550. Monthly.

Everybody's Money, Credit Union National Association Inc., Box 431, Madison, Wisconsin. Quarterly.

Family Circle, Family Circle, Inc., 488 Madison Ave., New York, N.Y. 10022 Monthly.

Journal of Consumer Affairs, American Council & Consumer Interests, 238 Stanley Hall, University of Missouri, Columbia, Missouri 65201.

U.S. Consumer, Consumer News, Inc. 813 National Press Building, Washington, D.C., 20004. Fortnightly

Two good collections of material available from the Government Printing Office are Consumer Education Bibliography compiled by the Department of Consumer Affairs and Guide to Federal Consumer Services.

* Available in Braille

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